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RECESSION - RECOVERY WATCH...

**A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions**

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Summary

The stock market crash has dominated the economic news of late. Here we take a look at some related developments. First, we note that the capitalized value of corporate profits, which takes account of both earnings and interest rates, dropped sharply in the second quarter. Hence it may help to account for investors' concern that the peak levels reached by stock prices last August were not justified. Our new long leading index, designed to give earlier advance warnings of recessions and recoveries, reached record high levels in July and August but moved down a bit in September. Another leading index, the Business Week leading index, reached its high to date in June and had declined about 4 percent by mid-October. So far these declines are not big enough or long enough to warrant forecasts of recession.

Capitalized Profits--A Market Depressant

One of the statistical measures introduced in these pages about a year ago may have some bearing on the recent stock market decline. We call it capitalized profits, and it represents the capital value of the current flow of earnings at the current level of long term interest rates. It took a sharp drop in the second quarter of this year, as a result of a small decline in profits and a substantial rise in bond yields (see Chart A). Third quarter profits figures for the series we use -- the Commerce Department's estimates of profits after taxes and after inventory valuation and capital consumption adjustments -- are not yet available. Forecasts of ordinary profits for the third quarter show some improvement, but not enough to compensate for the rise in bond yields through September. Hence capitalized profits probably declined again the third quarter.

CHART A.

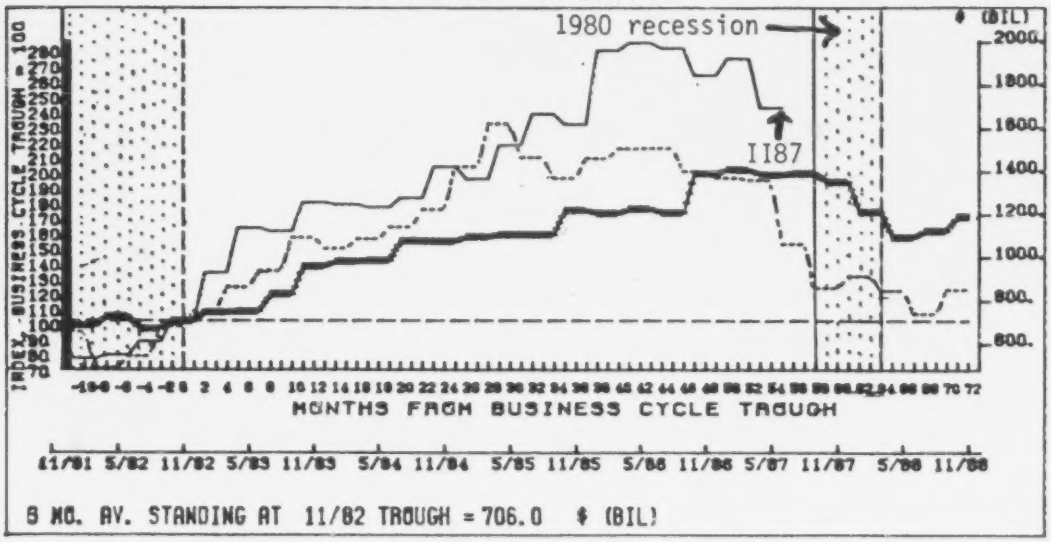
RECOVERY PATTERNS: CAPITALIZED PROFITS AND STOCK PRICES

———— 1982-87 Expansion

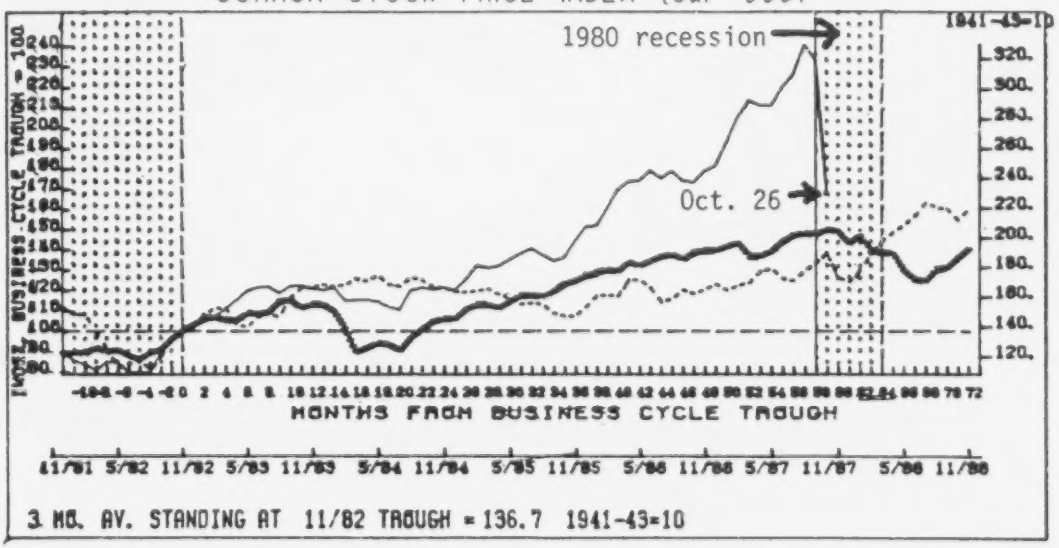
1961-69 Expansion

---------- 1975-80 Expansion

CAPITALIZED PROFITS*



COMMON STOCK PRICE INDEX (S&P 500)



*Corporate profits after taxes with inventory valuation and capital consumption adjustments, divided by Corporate Bond Yields (new issues, high grade).

This measure puts into a single figure two of the factors closely watched by investors in evaluating common stocks: earnings and interest rates. Since 1982 it has had a bigger rise than during the two long economic expansions of 1961-69 and 1975-80. Stock prices did likewise, though even more so. The declines in both capitalized profits and stock prices so far this year (through October 26!) have not eradicated this favorable showing -- but only time will tell.

New Long-Leading Index Dips in September

A new long-leading index, developed by the Center in its review of the Commerce Department's battery of economic indicators, reached a record high in July and August but dropped a little in September. The new index has anticipated recessions by 14 months, on average, and never by less than 7 months. Chart B compares the movements of the new index and its growth rate during the current expansion with the corresponding periods of the two previous long expansions. During the 1982-87 expansion the index has been following a course very similar to that of 1961-69, which lasted 108 months but was interrupted by a "mini-recession" in 1966-67. In the 1975-80 expansion, on the other hand, the end came after 58 months, and was preceded by a lengthy downtrend in the long-leading index, very different from the course it has been following in recent months. So far, the index has not signaled a recession, or even a mini-recession.

The new index has four components: corporate bond prices, a new indicator of profit margins in manufacturing, building permits for new housing, and the broad money supply (M2) adjusted for inflation. These four were selected because they led recessions, on average, by at least 12 months and recoveries by at least 6 months, whereas other leading indicators have shorter average leads. Moreover, there are good reasons to expect the long-leaders to produce similar swings in many of the short-leaders. For example, bond prices have lagged effects on stock prices, profit margins influence the average workweek, changes in the money supply affect the growth of debt, and building permits represent an early step in the process of building new houses. As a result, the long leading index has usually turned down several months before the Commerce Department's leading index (see Chart 4), even though two of the long leaders (money supply and building permits) are presently included in the Commerce Index.

It is too soon to tell whether the September drop in the long leading index is a harbinger of recession, or even a mini-recession. Usually the six-months smoothed growth rate in the index has been negative for three to six months before a recession begins, and the latest growth rate was a positive 2.5 percent (see bottom panel of Chart B). But the growth rate has been declining and it will be worth watching in the months ahead.

CHART B.

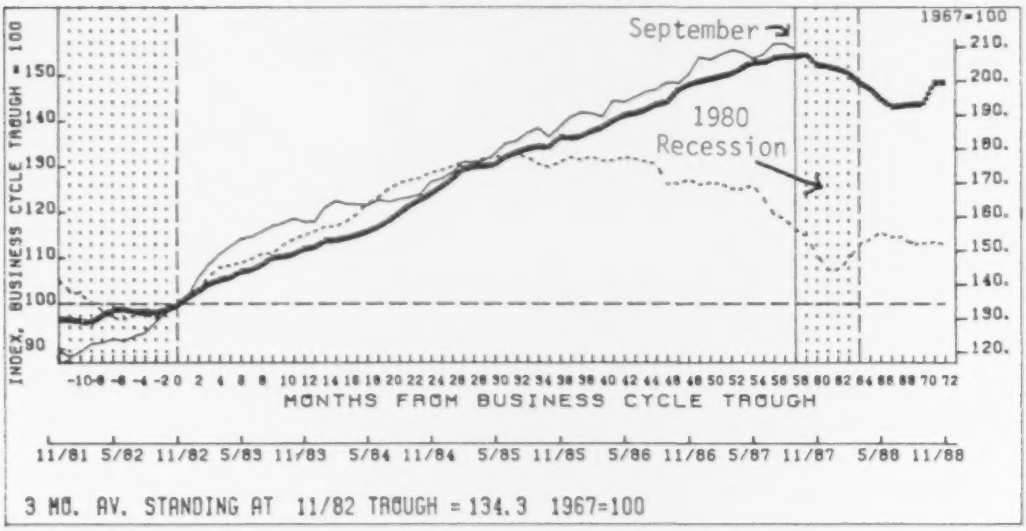
RECESSION-RECOVERY PATTERNS FOR THE LONG LEADING INDEX

———— 1982-87 Expansion

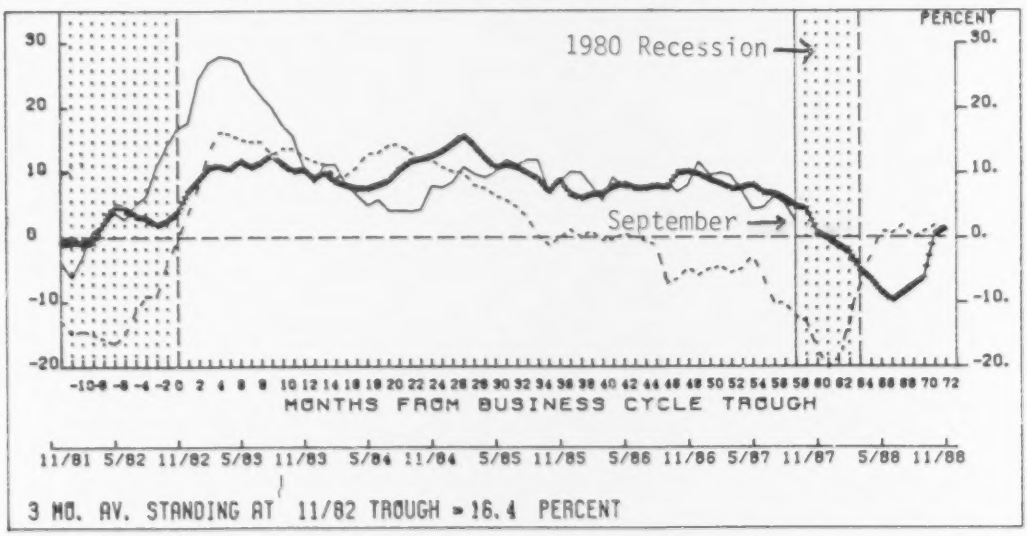
-·-·-·-·- 1961-69 Expansion

- - - - - - - - - - 1975-80 Expansion

LONG LEADING INDEX (CIBCR)


INDEX, BUSINESS CYCLE TROUGH = 100
1967=100
September
1980
Recession
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 134.3 1967=100

LONG LEADING INDEX, GROWTH RATE


PERCENT
1980 Recession
September
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 16.4 PERCENT

The four monthly components of the long leading index are the Dow-Jones corporate bond price average, the ratio of prices to unit labor cost in manufacturing, the money supply (M2) adjusted for inflation, and building permits for new housing.

Weekly Leading Index Weakens

Very few investors and even fewer leading indexes anticipated the dramatic slide in stock prices on October 19. One of the exceptions among the latter group was the Business Week leading index compiled by the Center, which has been drifting down (undramatically) since June. The latest figure, for the week ended October 17, was 4.2% below the June 20th peak. The smoothed annual growth rate as of October 17 was 1.0%, the lowest it has been since it dipped briefly below zero in 1984 (see Charts 1 and 6). It's virtually certain, of course, that the index will be sharply lower in the week of October 24, since that will include the stock market collapse. The slackening growth rate in industrial materials prices, which is another component of the index that is available daily, will also contribute to the decline. The concurrent drop in bond price yields, which tends to push the index up, will not be sufficient to offset these two negative factors. Data for the other four components are not yet available for the fateful week of October 24.

If June 1987 proves to be the cyclical peak in the Business Week index, it will be relevant to note that such peaks have preceded each of the eight recessions since 1948 and also two of the economic slowdowns (in 1951-52 and 1966-67). The leads before recessions have averaged 10 months, with a range extending from 5 months in one instance to 25 months in another. Other leading indexes, such as the long leading index discussed above, will help us evaluate the trend in the weekly index as more data become available.

RECESSION-RECOVERY SERIES AND CHARTS

Series & Chart #		Chart, Page
I.	**Composite Indexes**	
1	Business Week Leading Index (CIBCR)(L,L,L)	13
1A	N.A.P.M. Leading Index	13
2	Leading Employment Index (CIBCR)	13
3	Coincident Employment Index (CIBCR)	14
4	Leading Index (BCD 910)(L,L,L)	14
5	Coincident Index (BCD 920)(C,C,C)	14
6	Business Week Leading Index, Growth Rate (CIBCR)	15
6A	N.A.P.M. Leading Index, Growth Rate	15
7	Leading Employment Index, Growth Rate (CIBCR)	15
8	Coincident Employment Index, Growth Rate (CIBCR)	16
9	Leading Index, Growth Rate	16
10	Coincident Index, Growth Rate	16
11	Diffusion Index of Leading Indicators (CIBCR)	17
12	Lagging Index (BCD 930)(Lg,Lg,Lg)	17
13	Ratio, Coincident to Lagging index (BCD 940) (L,L,L)	17
14	Leading Index, Eight Countries excluding U.S. (CIBCR)	18
15	Eight-Country Leading Index (excl. U.S.), Growth Rate (CIBCR)	18
II.	**Output, Income and Sales**	
16	Real GNP (BCD 50)(C,C,C)	19
17	Real GNP, Growth Rate	19
18	Industrial Production (BCD 47)(C,C,C)	19
19	Real Personal Income (BCD 52)(C,C,C)	20
20	Real Consumer Expenditures (BCD 231)(C,C,C)	20
21	Real Retail Sales (BCD 59)(U,L,U)	20
III.	**Employment and Unemployment**	
22	Total Employment	21
23	Employment-to-Population Ratio (U,Lg,U)	21
24	Nonfarm Employment (BCD 41)(C,C,C)	21
25	Nonfarm Employee-Hours (BCD 48)(U,C,C)	22
26	Employment in Goods-Producing Industries (BCD 40)(L,C,U)	22
27	Employment in Service-Producing Industries	22
28	Employment Diffusion Index, 186 Industries (BCD 963)	23
29	Unemployment Severity Index (CIBCR)	23
30	Unemployment Rate, Total (L,Lg,U)	23
31	Unemployment Rate, Insured (BCD 45)(L,Lg,U)	24
32	Initial Claims for Unemployment Insurance (BCD 5)(L,C,L)	24
33	Short-Duration Unemployment Rate	24
34	Layoff Rate	25
35	Voluntary-Involuntary Part-Time Employment Ratio	25
36	Average Workweek, Manufacturing (BCD 1)(L,L,L)	25
37	Overtime Hours, Manufacturing (BCD 24)(L,C,L)	26

IV. Investment Commitments and Inventories

38 Housing Starts (BCD 28)(L,L,L) 27
39 Housing Permits (BCD 29)(L,L,L). 27
40 Contracts and Orders for Plant and Equipment (BCD 20)(L,L,L) . 27
41 New Capital Appropriations, Manufacturing (U,Lg,U) 28
42 Inventory/Sales Ratio (BCD 77)(Lg,Lg,Lg) 28
43 Inventory Change (BCD 36)(L,L,L) 28

V. Productivity, Wages, Costs, Prices and Profits

44 Output per Hour, Nonfarm Business Sector (N.B.S.) (BCD 358), Growth Rate. 29
45 Unit Labor Costs (N.B.S.), Growth Rate 29
46 Hourly Compensation (N.B.S.) (BCD 345), Growth Rate. 29
47 Real Hourly Compensation (N.B.S.)(BCD 346), Growth Rate. . . . 30
48 Selling Prices, (N.B.S.) Growth Rate 30
49 Growth in Prices (Chart 48) minus Growth in Unit Labor Costs (Chart 45). 30
50 Corporate Profit margin (BCD 81)(U,L,L). 31
51 Price/Labor Cost Ratio (N.B.S.)(BCD 27)(L,L,L) 31
52 Large Business Failures (Liabilities $100,000 and over) (L,L,L) 31
53 Leading Index of Inflation (CIBCR) 32
54 Consumer Price Index (BCD 320) 32
55 Consumer Price Index, Growth Rate. 32
56 Industrial Materials Price Index, Journal of Commerce (U,L,L). 33
57 Industrial Materials Price Index, Growth Rate (L,L,L). 33
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59 Dun & Bradstreet Survey of Businessmen's Anticipated Selling Prices. 34

VI. Money, Credit, Interest Rates and Stock Prices

60 Business and Consumer Debt, Growth Rate (L,L,L). 35
61 Federal Debt, Growth Rate. 35
62 Total Debt, Growth Rate. 35
63 Money Supply (M1), Growth Rate (L,L,L) 36
64 Broad Money Supply (M2), Growth Rates (L,C,U). 36
65 Treasury Bill Rate (BCD 114)(C,Lg,Lg). 36
66 Corporate Bond Yields (BCD 116)(Lg,Lg,Lg). 37
67 Stock Prices (BCD 19)(L,L,L) 37

The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover more than sixty indicators and give the information needed to compare the current expansion with two very long expansion since 1961. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business percentages of business cycle trough standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 58 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Actual Levels

		UNIT	Months After Business cycle Trough	Expansions Starting Feb. 1961	Mar. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	58	3.2	-1.4	2.3	SEPT
6A.	N.A.P.M. INDEX, GROWTH RATE	%	58	4.7	-4.5	9.7	SEPT
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	58	8.5	0.1	5.6	SEPT
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	58	10.4	1.5	5.7	SEPT
9.	LEADING INDEX, GROWTH RATE.	%	57	5.6	-6.5	6.9	AUG
10.	COINCIDENT INDEX, GROWTH RATE	%	57	9.7	-0.2	2.2	AUG
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	58	72.0	66.0	73.0	SEPT
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	57	100.2	119.0	130.7	SEPT
15.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	56	1.0	5.1	13.7	JULY
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	19Q	7.8	0.7	3.3	Q3
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	58	57.3	60.3	61.9	SEPT
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	58	89.2	50.8	71.9	SEPT
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		58	44.5	64.5	82.4	SEPT
30.	UNEMPLOYMENT RATE: TOTAL	%	58	3.0	6.2	5.8	SEPT
31.	UNEMPLOYMENT RATE: INSURED	%	58	2.6	3.3	2.3	SEPT
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	58	3.0	4.9	4.2	SEPT
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	58	3.3	5.9	4.1	SEPT
35.	PART-TIME EMPLOYMENT RATIO	%	58	4.0	3.6	2.8	SEPT
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	56	14.3	16.0	15.2	JULY
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	56	15.3	-24.6	35.0	JULY
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	18Q	2.7	-2.7	0.6	Q2
45.	UNIT LABOR COSTS, GROWTH RATE	%	18Q	0.6	12.2	2.0	Q2
46.	HOURLY COMPENSATION, GROWTH RATE	%	18Q	3.5	9.2	2.5	Q2
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	18Q	1.8	-2.9	-1.7	Q2
48.	SELLING PRICE INDEX, GROWTH RATE	%	18Q	1.9	9.3	2.2	Q2
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	18Q	1.3	-2.9	0.2	Q2
50.	CORPORATE PROFIT MARGIN	%	18Q	13.5	6.1	6.2	Q2
51.	PRICE/LABOR COST RATIO	1977=100	18Q	102.0	97.1	99.2	Q2
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	58	2.2	14.3	4.2	SEPT
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	58	1.2	7.1	17.2	SEPT
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	55	3.0	12.0	9.0	Q2(JUN)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	58	65.0	90.0	69.0	Q3(SEP)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	57	12.0	12.4	4.4	SEPT
61.	FEDERAL DEBT, GROWTH RATE	%	58	1.0	6.9	7.7	SEPT
62.	TOTAL DEBT, GROWTH RATE	%	57	8.0	10.9	6.0	AUG
63.	MONEY SUPPLY (M1), GROWTH RATE	%	58	5.8	7.4	4.5	SEPT
64.	MONEY SUPPLY (M2), GROWTH RATE	%	58	8.5	7.5	4.0	SEPT
65.	TREASURY BILL RATE (3-MONTH)	%	58	4.4	12.0	6.4	SEPT
66.	NEW CORPORATE BOND YIELD (AA)	%	58	4.9	11.6	10.6	SEPT

TABLE 2

RECESSION-RECOVERY STATUS UP TO 58 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Percentage Change from Trough Levels

	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes					
1. BUSINESS WEEK LEADING INDEX (CIBCR)	58	30.8	30.1	48.5	SEPT
1A. N.A.P.M. INDEX	58	36.3	27.8	27.6	SEPT
2. LEADING EMPLOYMENT INDEX (CIBCR)	58	36.9	26.4	34.1	SEPT
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)	58	36.4	41.5	39.3	SEPT
4. LEADING INDEX (BCD)	57	36.7	29.1	37.9	AUG
5. COINCIDENT INDEX (BCD)	57	37.4	32.0	27.2	AUG
12. LAGGING INDEX (BCD)	57	20.3	7.2	9.2	AUG
14. EIGHT-COUNTRY LEADING INDEX (CIBCR)	56	6.0	25.1	31.3	JULY
II. Output, Income and Sales					
16. REAL GNP	19Q	28.5	21.1	21.3	Q3
18. INDUSTRIAL PRODUCTION INDEX	58	48.2	34.5	30.5	SEPT
19. REAL PERSONAL INCOME	57	26.7	19.3	17.0	AUG
20. REAL CONSUMER EXPENDITURES	57	26.0	20.0	21.9	AUG
21. REAL RETAIL SALES	57	30.1	20.6	26.8	AUG
III. Employment and Unemployment					
22. TOTAL EMPLOYMENT	58	9.5	16.7	13.6	SEPT
24. NONFARM EMPLOYMENT	58	16.4	18.7	15.4	SEPT
25. NONFARM EMPLOYEE-HOURS	58	17.0	17.9	15.6	SEPT
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES.	58	14.9	17.5	8.4	SEPT
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	58	17.3	19.2	17.9	SEPT
32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	58	-48.5	-21.5	-52.3	SEPT
36. AVERAGE WORKWEEK, MANUFACTURING	58	5.3	2.9	3.7	SEPT
37. OVERTIME HOURS, MANUFACTURING	58	81.0	29.2	56.5	SEPT
IV. Investment Commitments and Inventories					
38. NEW PRIVATE HOUSING STARTS	58	33.5	38.6	30.1	SEPT
39. NEW PRIVATE HOUSING PERMITS	58	29.6	56.3	18.6	SEPT
40. CONTRACT & ORDERS, PLANT & EQUIPMENT	57	54.3	54.9	55.2	AUG
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING	18Q	115.5	41.9	23.3	Q2
V. Productivity, Wages, Costs, Prices and Profits					
52. LARGE BUSINESS FAILURES	58	9.1	16.2	-8.9	SEPT
53. LEADING INDEX OF INFLATION (CIBCR)	57	12.1	19.3	18.6	AUG
54. CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	58	6.7	47.8	17.0	SEPT
56. INDUSTRIAL MATERIALS PRICE INDEX	58	7.7	35.9	14.1	AUG
VI. Money, Credit, Interest Rates and Stock Prices					
67. STOCK PRICE INDEX (S&P 500)	58	47.9	33.8	133.6	SEPT

TABLE 3

RECESSION-RECOVERY STATUS UP TO 58 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Differences from Trough Levels

	Unit	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes						
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	58	-3.3	3.9	-2.2	SEPT
6A. N.A.P.M. INDEX, GROWTH RATE	%	58	4.8	13.2	12.9	SEPT
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	%	58	10.7	10.0	4.8	SEPT
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	58	18.4	18.2	13.6	SEPT
9. LEADING INDEX, GROWTH RATE.	%	57	4.3	7.0	2.3	AUG
10. COINCIDENT INDEX, GROWTH RATE	%	57	16.5	14.9	9.0	AUG
11. DIFFUSION INDEX OF LEADING INDICATORS	% RISING	58	35.3	48.3	26.3	SEPT
13. RATIO, COINCIDENT TO LAGGING INDEX	1967=100	57	12.4	22.3	18.5	SEPT
15. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	56	-2.7	17.2	14.1	JULY
II. Output, Income and Sales						
17. REAL GNP GROWTH RATE	%	19Q	7.2	5.7	4.4	Q3
III. Employment and Unemployment						
23. EMPLOYMENT TO POPULATION RATIO	%	58	1.0	3.8	4.2	SEPT
28. EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	58	68.9	36.7	50.5	SEPT
29. UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		58	-47.1	-36.7	-101.7	SEPT
30. UNEMPLOYMENT RATE: TOTAL	%	58	-2.7	-2.1	-4.7	SEPT
31. UNEMPLOYMENT RATE: INSURED	%	58	-3.7	-3.0	-2.7	SEPT
33. SHORT-DURATION UNEMPLOYMENT RATE.	%	58	-1.7	-1.1	-2.3	SEPT
34. LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	58	-3.1	-2.6	-4.9	SEPT
35. PART-TIME EMPLOYMENT RATIO	%	58	2.3	-0.8	0.9	SEPT
IV. Investment Commitments and Inventories						
42. INVENTORY/SALES RATIO (TIMES 10)	%	56	-1.2	-1.3	-1.9	JULY
43. CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	56	40.4	34.6	76.2	JULY
V. Productivity, Wages, Costs, Prices and Profits						
44. OUTPUT PER HOUR, GROWTH RATE	%	18Q	0.9	-2.2	-0.5	Q2
45. UNIT LABOR COSTS, GROWTH RATE	%	18Q	-0.7	0.8	-3.3	Q2
46. HOURLY COMPENSATION, GROWTH RATE	%	18Q	0.3	-1.9	-4.0	Q2
47. REAL HOURLY COMPENSATION, GROWTH RATE	%	18Q	0.0	-3.1	-4.0	Q2
48. SELLING PRICE INDEX, GROWTH RATE	%	18Q	2.2	-3.9	-2.1	Q2
49. GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	18Q	2.9	-4.7	1.2	Q2
50. CORPORATE PROFIT MARGIN	%	18Q	4.3	0.4	2.3	Q2
51. PRICE/LABOR COST RATIO	1977=100	18Q	5.4	-0.1	3.8	Q2
55. CONSUMER PRICE INDEX, GROWTH RATE	%	58	0.8	4.6	0.2	SEPT
57. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	58	5.9	20.2	24.2	SEPT
58. IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	55	4.8	-3.6	10.7	Q2(JUN)
59. ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	58	10.0	14.3	1.3	Q3(SEP)
VI. Money, Credit, Interest Rates and Stock Prices						
60. BUSINESS & CONSUMER DEBT, GROWTH RATE	%	57	4.4	6.5	4.6	SEPT
61. FEDERAL DEBT, GROWTH RATE	%	58	1.5	-4.4	-11.8	SEPT
62. TOTAL DEBT, GROWTH RATE	%	57	4.2	3.7	1.2	AUG
63. MONEY SUPPLY (M1), GROWTH RATE	%	58	4.2	3.7	-5.4	SEPT
64. MONEY SUPPLY (M2), GROWTH RATE	%	58	2.0	0.0	-5.8	SEPT
65. TREASURY BILL RATE (3-MONTH)	%	58	2.0	6.5	-1.5	SEPT
66. NEW CORPORATE BOND YIELD (AA)	%	58	0.4	2.3	-1.6	SEPT

HOW TO READ CHARTS

ACTUAL LEVEL CHARTS

TITLE: If the title does not say "growth rate," then the chart is for the actual level, rather than the growth rate.

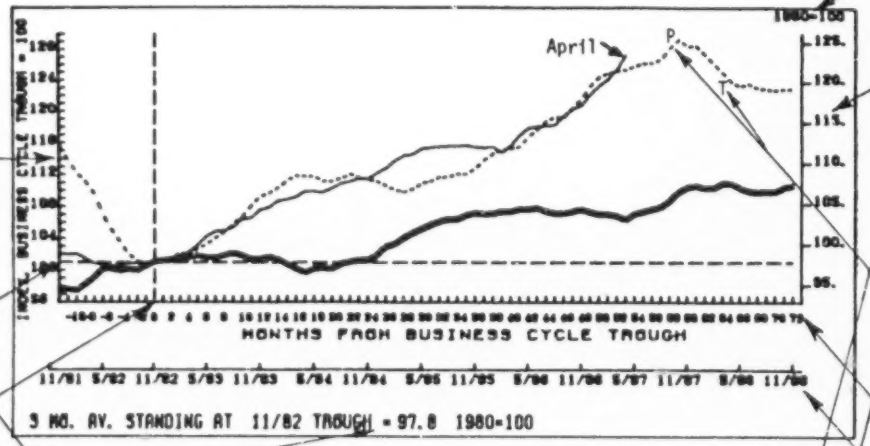
LEFT-HAND SCALE measures movements of both current and past expansions, relative to their standing at the respective reference troughs (i.e. for each expansion the standing at the trough equals 100). This is the common vertical scale along which the expansions are compared.

HORIZONTAL DOTTED LINE shows level at reference trough (100) for current and past expansions.

VERTICAL DOTTED LINE represents reference trough dates for current and past expansions, which are all aligned so that the reference trough dates are positioned on the vertical line.

STANDING AT THE TROUGH for the current expansion (when the expansion began) is typically calculated as the 3-month average centered on the trough month.

14. EIGHT-COUNTRY LEADING INDEX (CIBCR)


1980=100
April
P
T
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 97.8 1980=100

UNIT for right-hand scale, which refers only to the current expansion.

RIGHT-HAND SCALE refers only to current expansion. It is a transformation of the left hand scale to show the current expansion in original units rather than with trough standing = 100.

P indicates the January 1980 PEAK, marking the start of the 1980 recession, which lasted till the July 1980 TROUGH, indicated by T.

HORIZONTAL SCALE measures months from business cycle trough for both the current and the past expansions. This is the common time scale along which the recoveries are compared.

ACTUAL DATES, referring only to the current expansion.

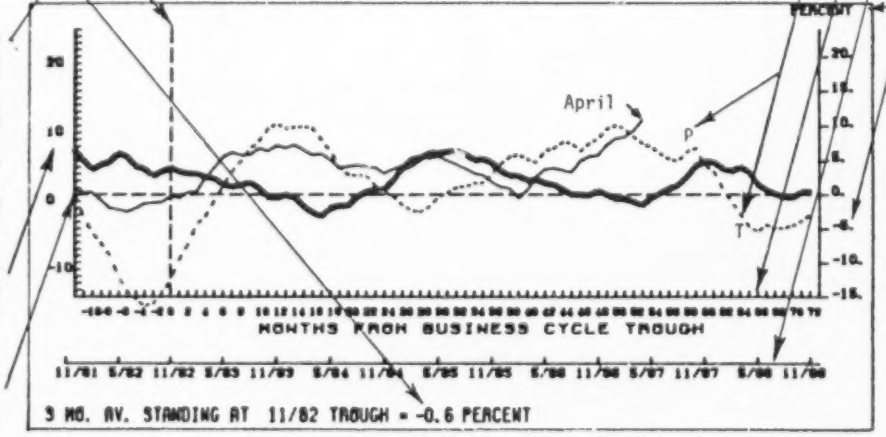
GROWTH RATE CHARTS

TITLE: If the title says "growth rate," then the chart is for the "6-month smoothed growth rate," rather than the actual level. These growth rates are obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

LEFT-HAND SCALE, (same as the right-hand scale) shows growth rates in percent for both current and past expansions.

HORIZONTAL DOTTED LINE is drawn typically at 0% growth rate, a natural reference level for both current and past expansions.

15. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE


PERCENT
April
P
T
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -0.6 PERCENT

UNIT for both scales (percent), referring to both current and past growth rates in expansions.

RIGHT-HAND SCALE, which refers to both current and past expansions.

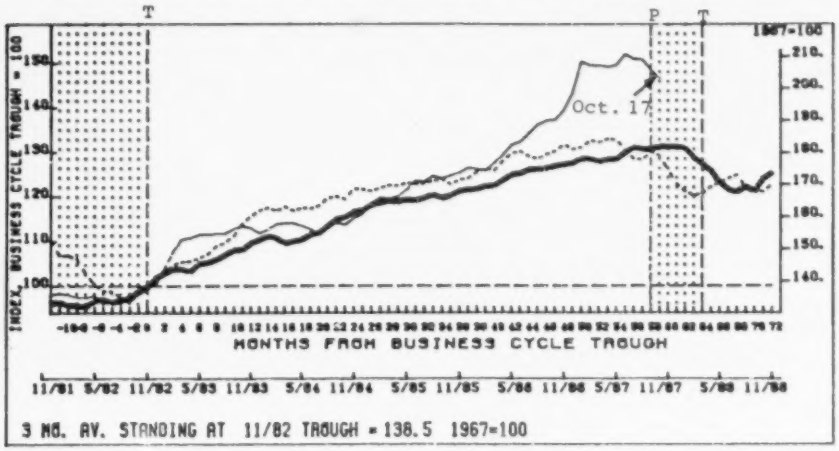
━━━━━ THICK LINE indicates 1961-69 expansion (from February 1961) which continued for 106 months.

- - - - - - - - - DOTTED LINE indicates the 1975-80 expansion (from Mar. 1975), which ended after 58 months, and the subsequent recession (from January 1980 to July 1980).

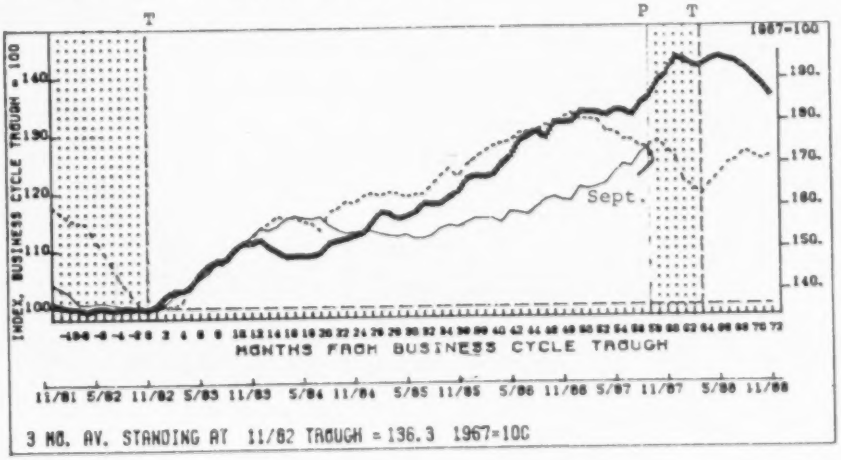
——— THIN LINE indicates the current expansion (business cycle trough: November 1982 or IV Q 1982).

COMPOSITE INDEXES

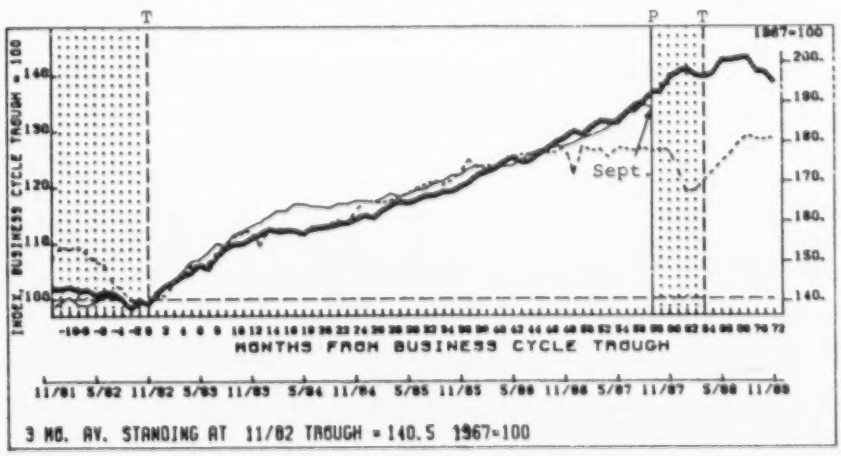
1. BUSINESS WEEK LEADING INDEX (CIBCR)



1A. N.A.P.M. LEADING INDEX

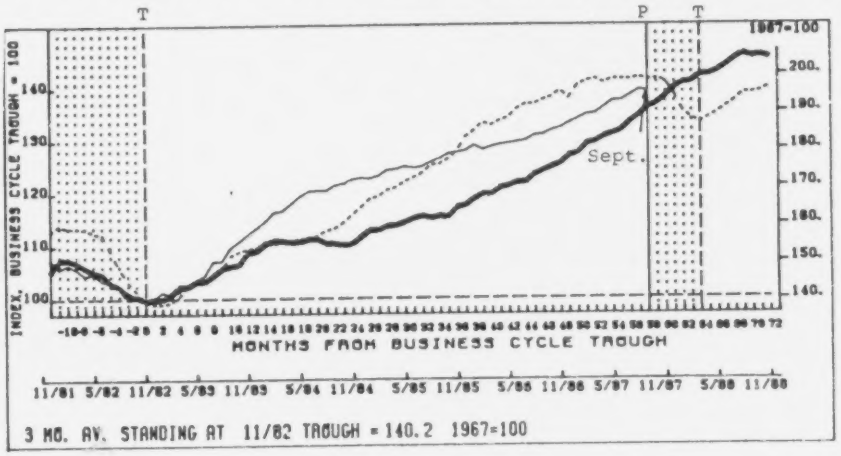

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 136.3 1967=100

2. LEADING EMPLOYMENT INDEX (CIBCR)

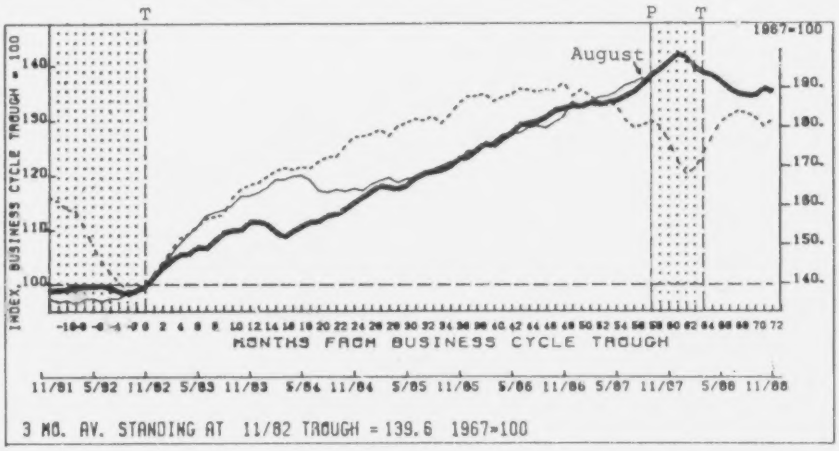

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.5 1967=100

COMPOSITE INDEXES, continued

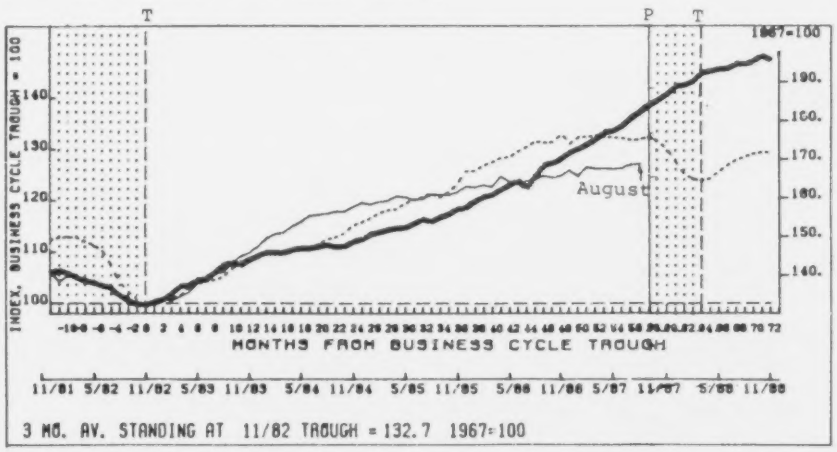
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)


T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.2 1967=100

4. LEADING INDEX (BCD)

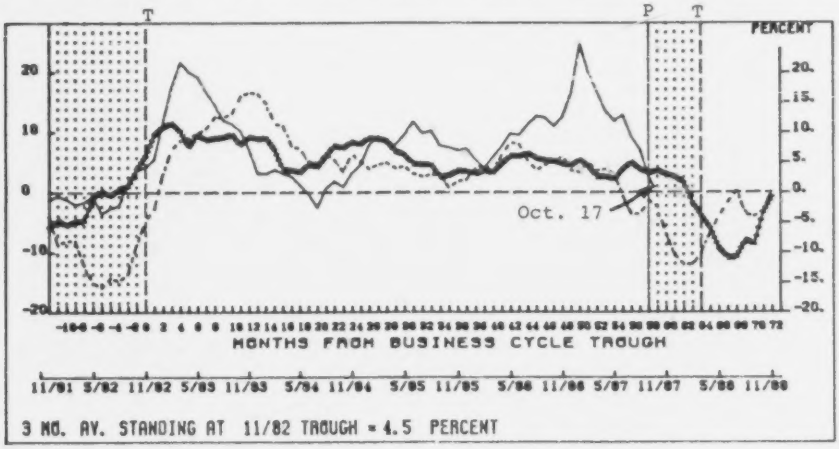

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 139.6 1967=100

5. COINCIDENT INDEX (BCD)

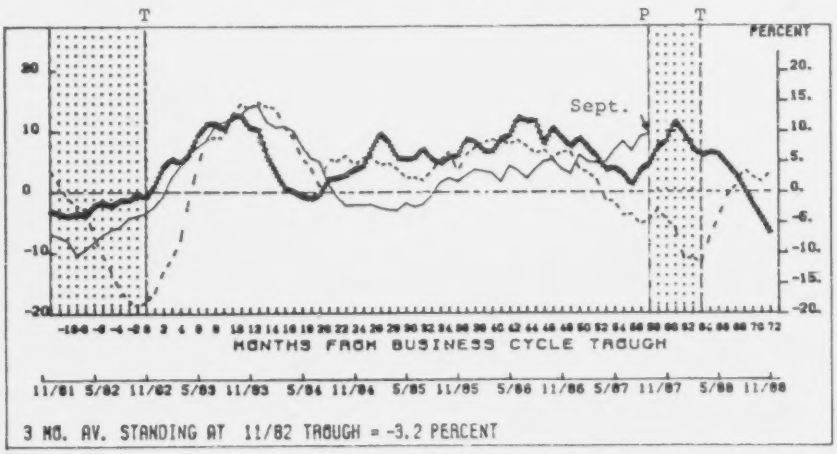

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 132.7 1967=100

COMPOSITE INDEX GROWTH RATES

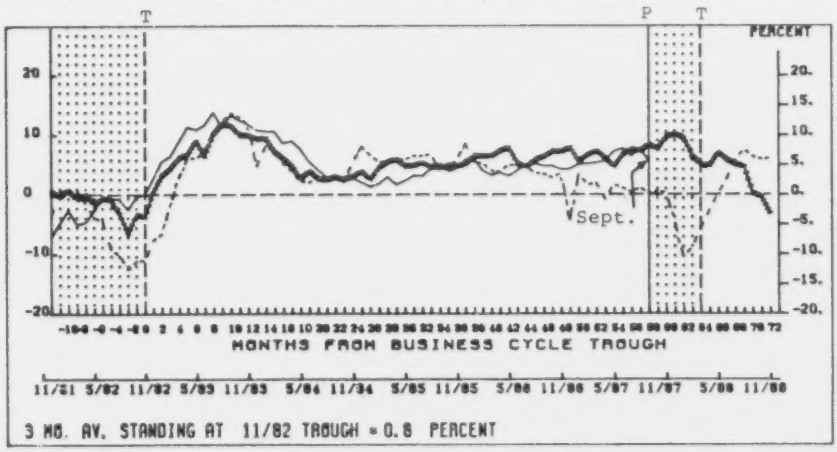
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
Oct. 17
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.5 PERCENT

6A. N.A.P.M. LEADING INDEX, GROWTH RATE

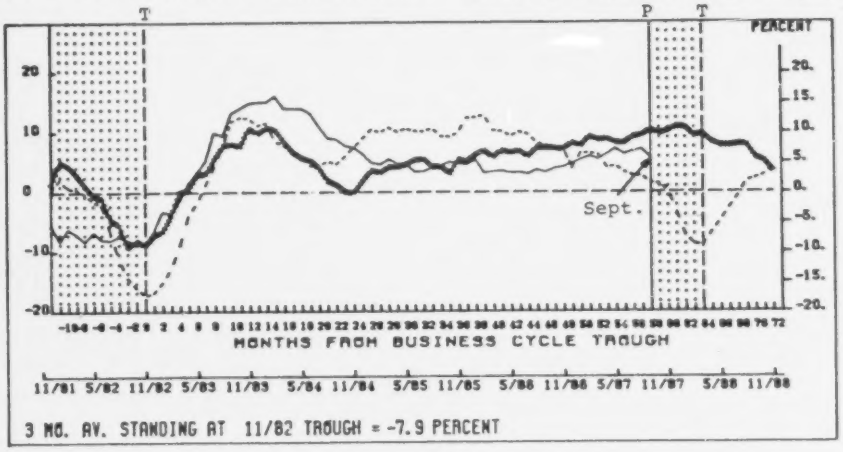

T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -3.2 PERCENT

7. LEADING EMPLOYMENT INDEX, GROWTH RATE

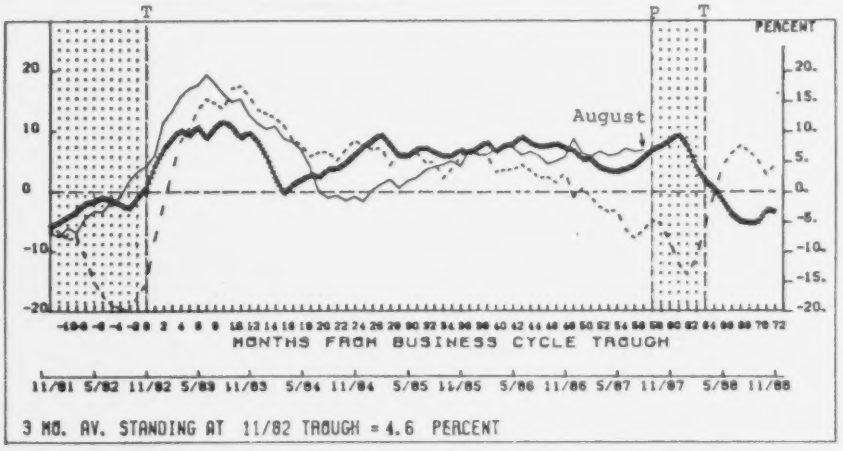

T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 0.8 PERCENT

COMPOSITE INDEX GROWTH RATES, continued

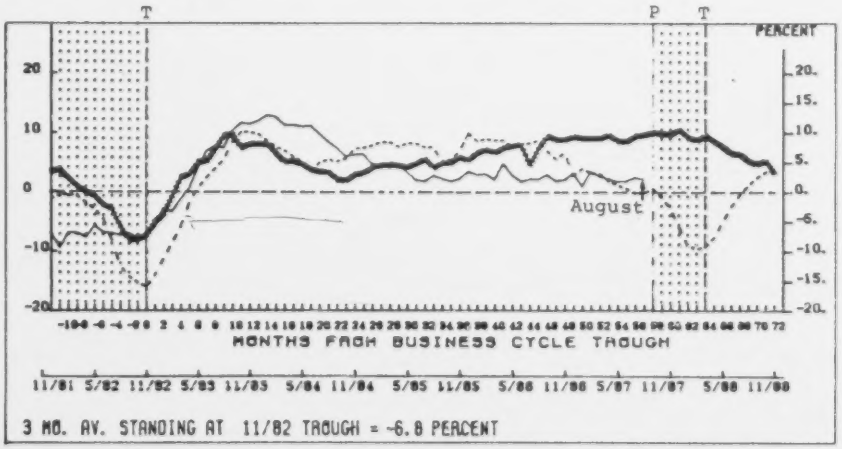
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE (CIBCR)


T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -7.9 PERCENT

9. LEADING INDEX, GROWTH RATE (BCD)

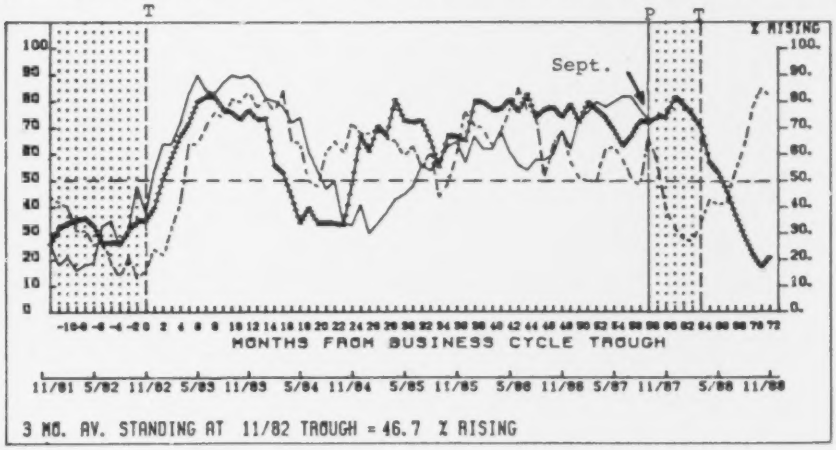

T
P
T
PERCENT
August
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.6 PERCENT

10. COINCIDENT INDEX, GROWTH RATE (BCD)


T
P
T
PERCENT
August
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -6.8 PERCENT

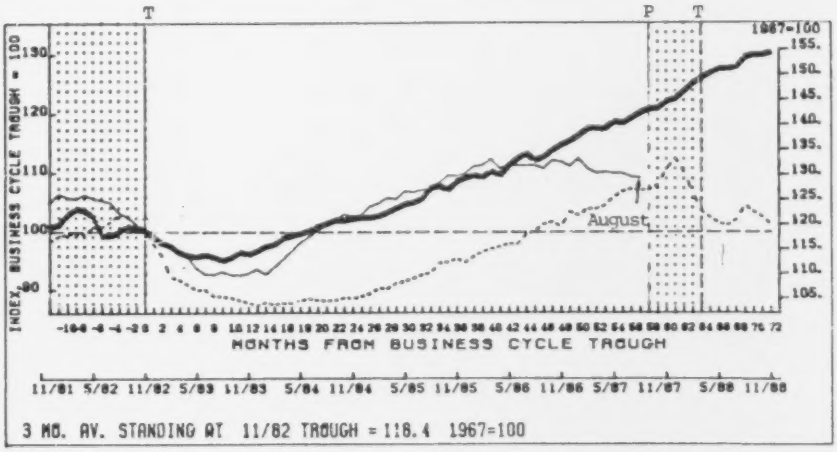
OTHER COMPOSITE INDEXES

11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)



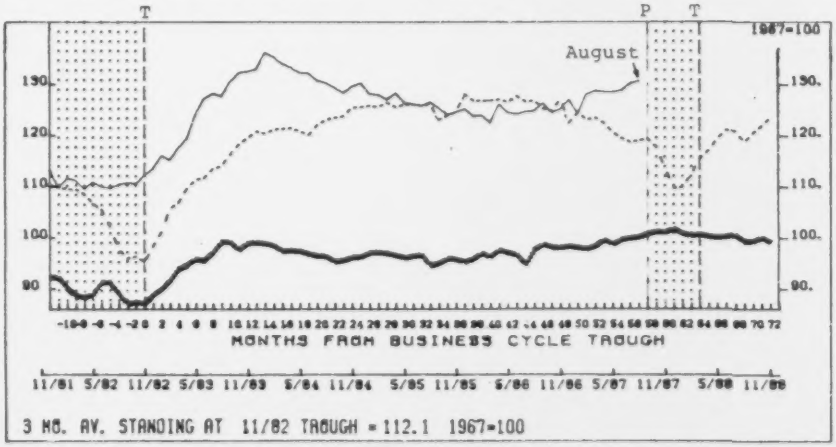
3 MO. AV. STANDING AT 11/82 TROUGH = 46.7 % RISING

12. LAGGING INDEX (BCD)



3 MO. AV. STANDING AT 11/82 TROUGH = 118.4 1967=100

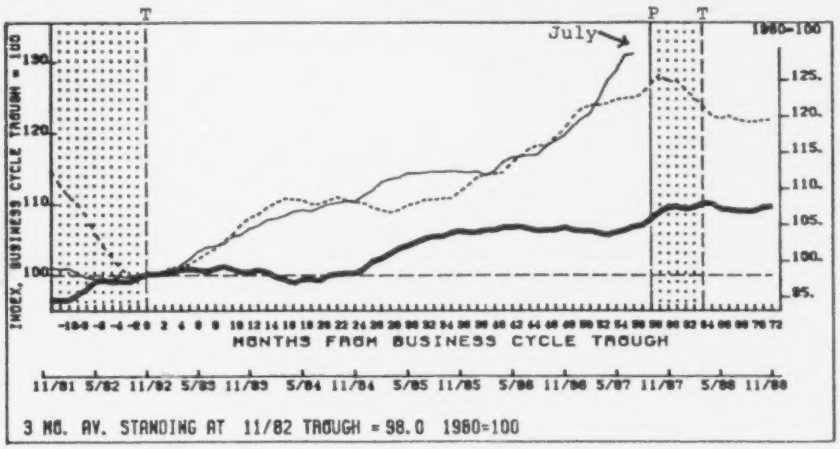
13. RATIO, COINCIDENT TO LAGGING INDEX



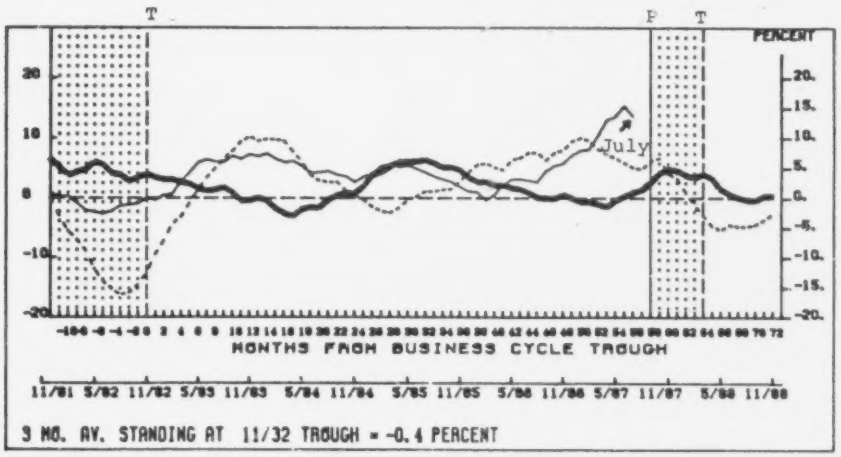
3 MO. AV. STANDING AT 11/82 TROUGH = 112.1 1967=100

OTHER COMPOSITE INDEXES

14. EIGHT-COUNTRY LEADING INDEX (CIBCR)*



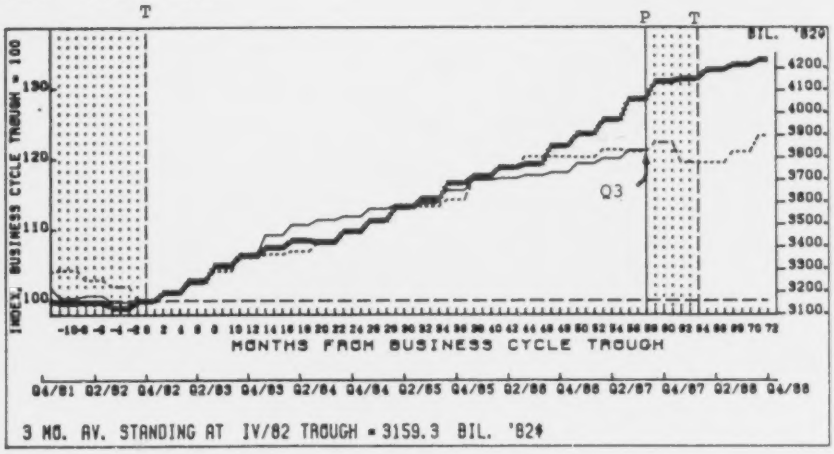
15. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE



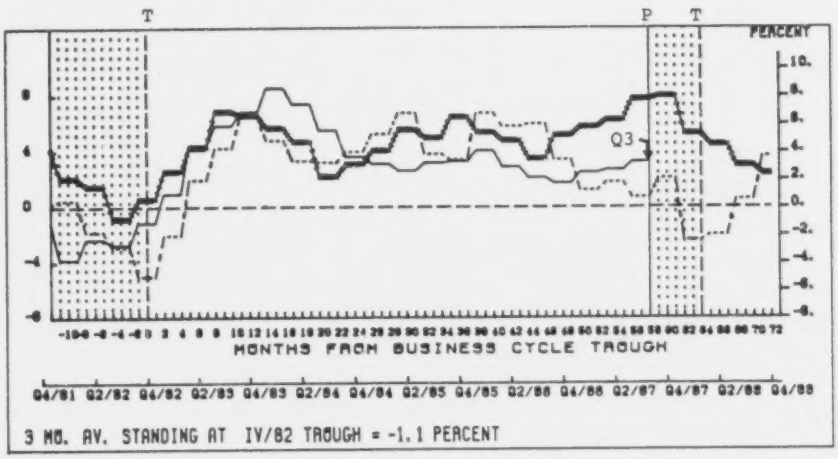
*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia & Taiwan.

OUTPUT, INCOME AND SALES

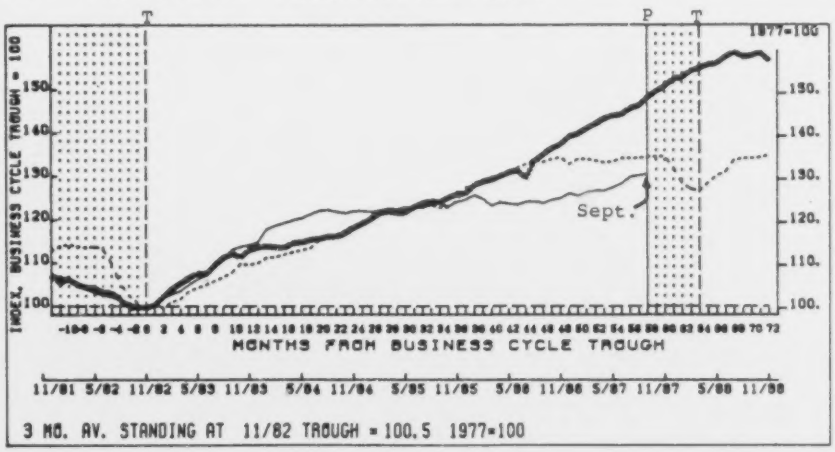
16. REAL GNP



17. REAL GNP, GROWTH RATE

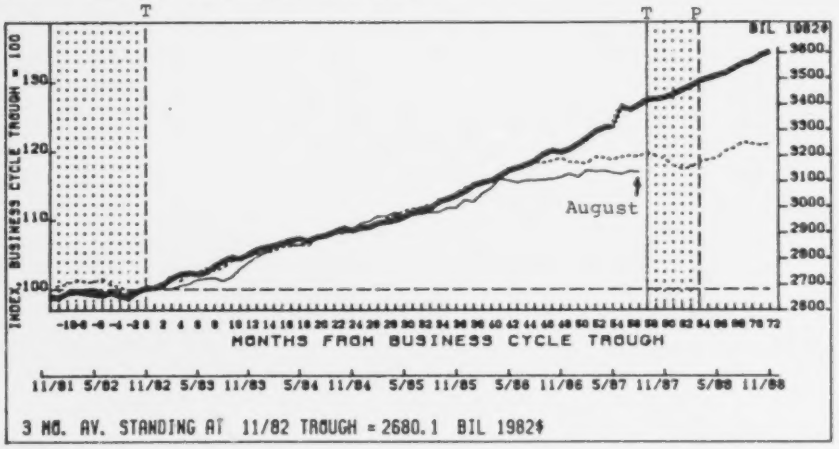


18. INDUSTRIAL PRODUCTION INDEX

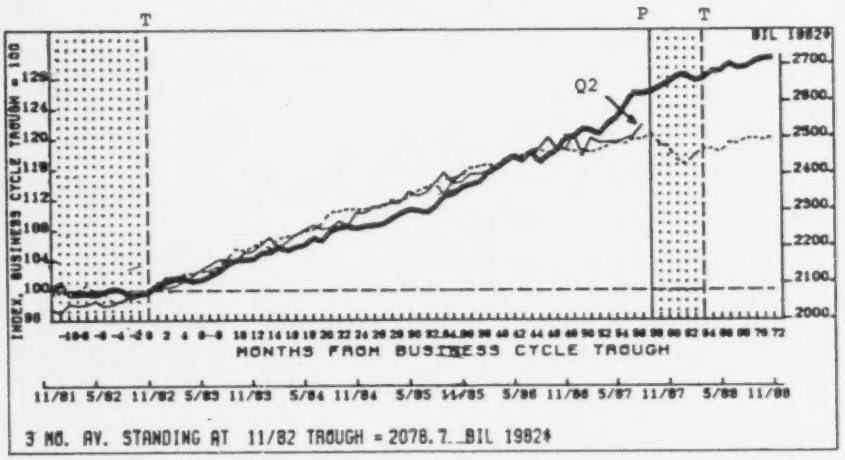


OUTPUT, INCOME AND SALES, continued

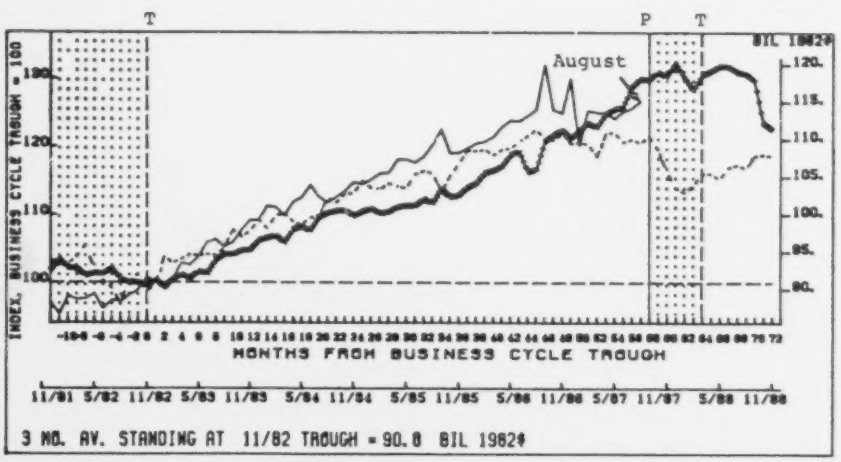
19. REAL PERSONAL INCOME


T
T
P
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2680.1 BIL 1982$

20. REAL CONSUMER EXPENDITURES

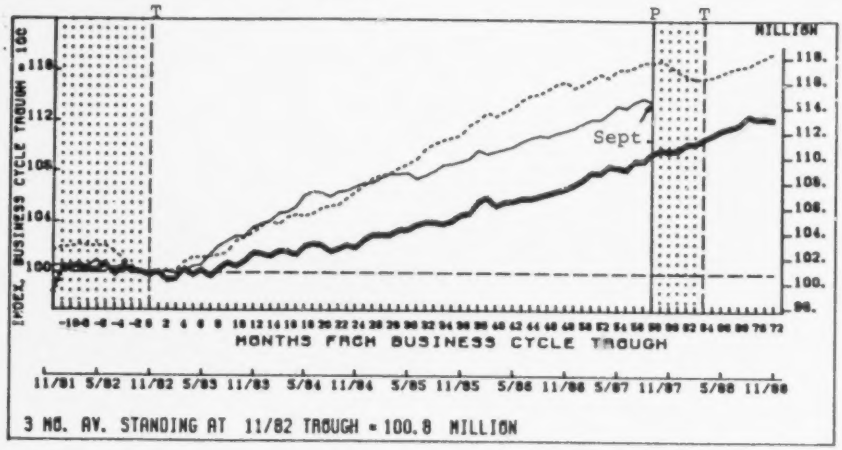

T
P
T
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
Q2
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2078.7 BIL 1982$

21. REAL RETAIL SALES

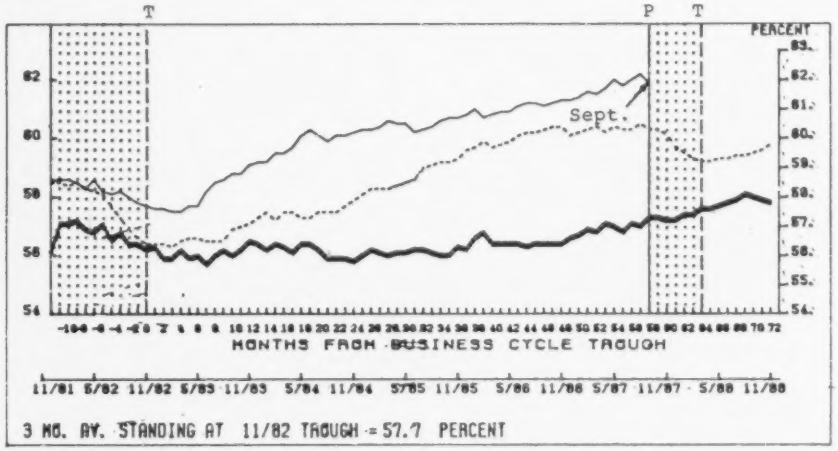

T
P
T
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 90.8 BIL 1982$

EMPLOYMENT

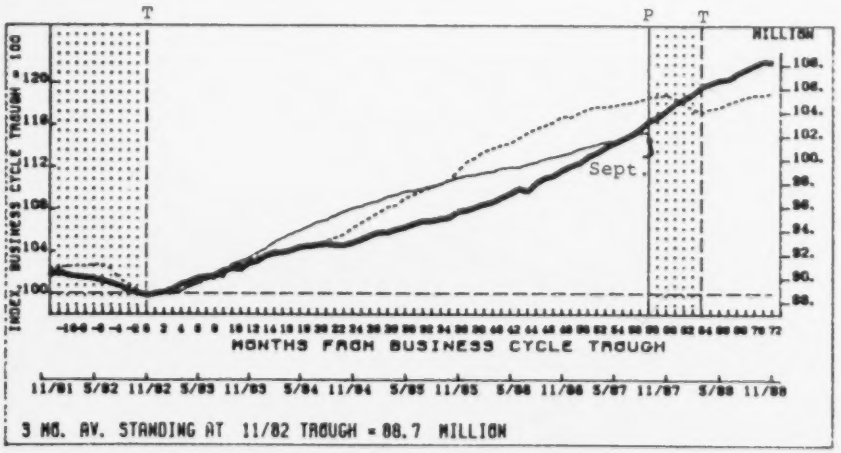
22. TOTAL EMPLOYMENT


T
P
T
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 100.8 MILLION

23. EMPLOYMENT TO POPULATION RATIO

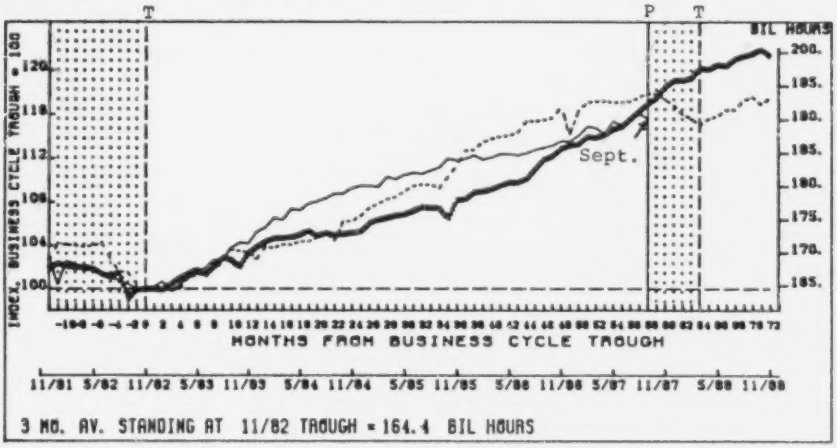

T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 57.7 PERCENT

24. NONFARM EMPLOYMENT

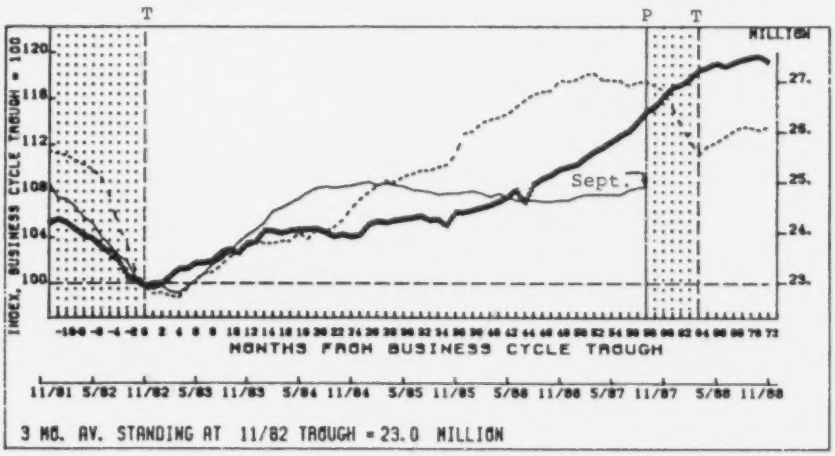

T
P
T
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 88.7 MILLION

EMPLOYMENT, continued

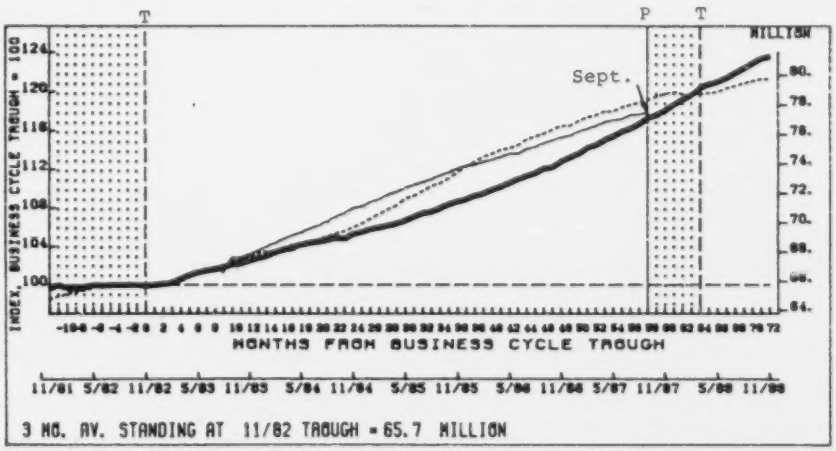
25. NONFARM EMPLOYEE HOURS


T
P
T
BIL HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 164.4 BIL HOURS

26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES

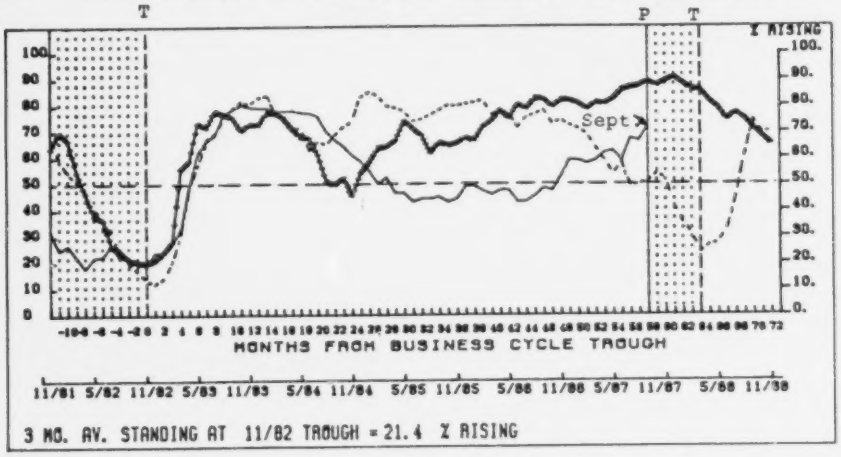

T
P
T
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 23.0 MILLION

27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES

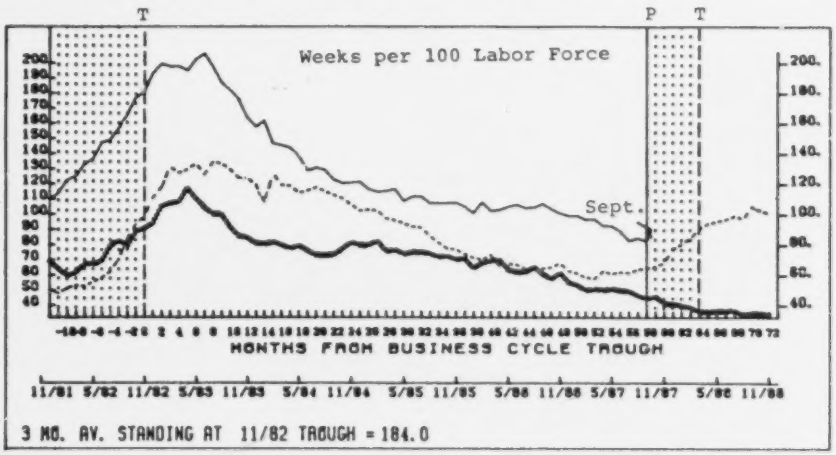

T
P
T
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 65.7 MILLION

UNEMPLOYMENT

28. EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES


T
P
T
% RISING
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 21.4 % RISING

29. UNEMPLOYMENT SEVERITY INDEX


T
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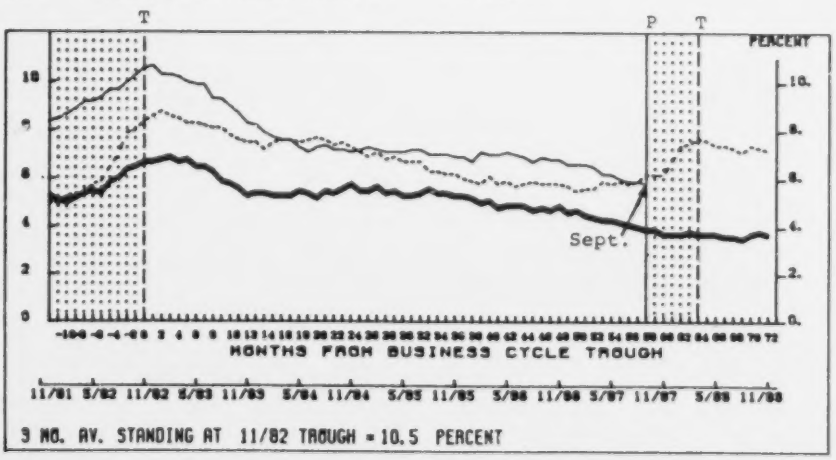
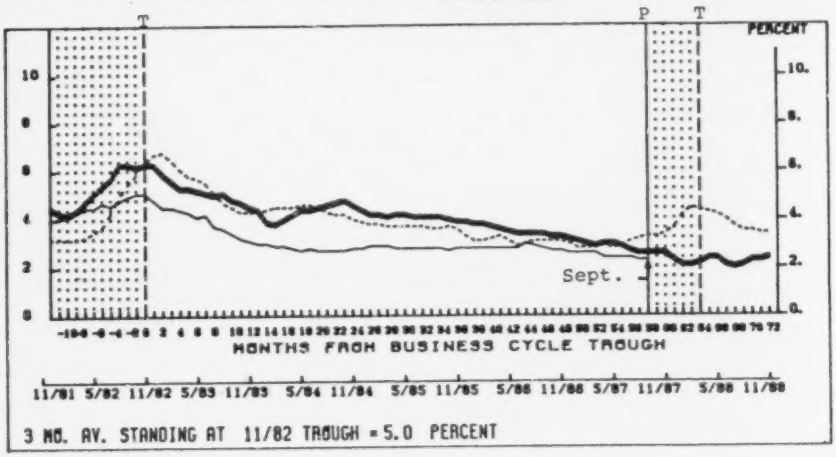
T
Weeks per 100 Labor Force
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 184.0

30. UNEMPLOYMENT RATE: TOTAL

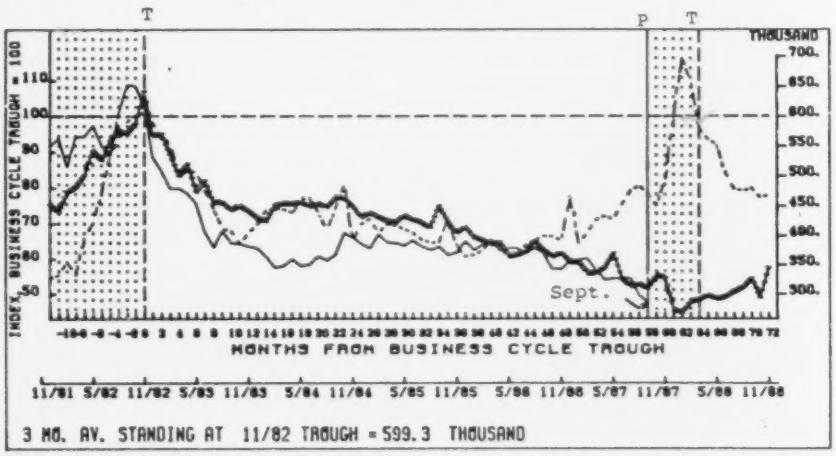

T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 10.5 PERCENT

UNEMPLOYMENT, continued

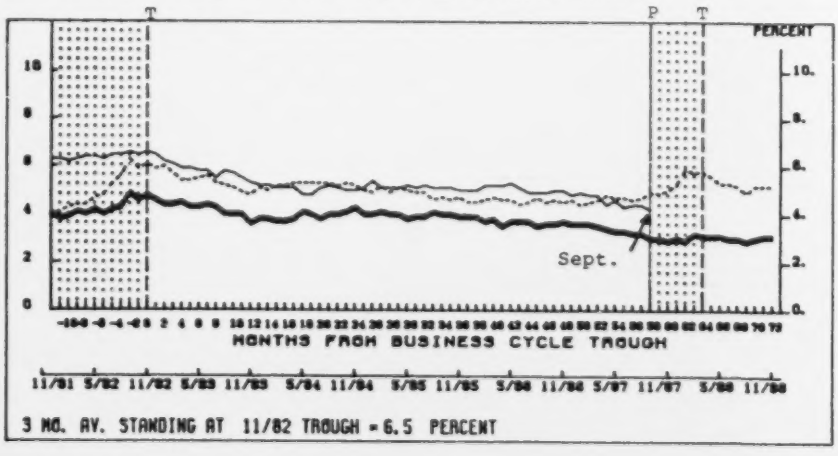
31. UNEMPLOYMENT RATE: INSURED



32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE

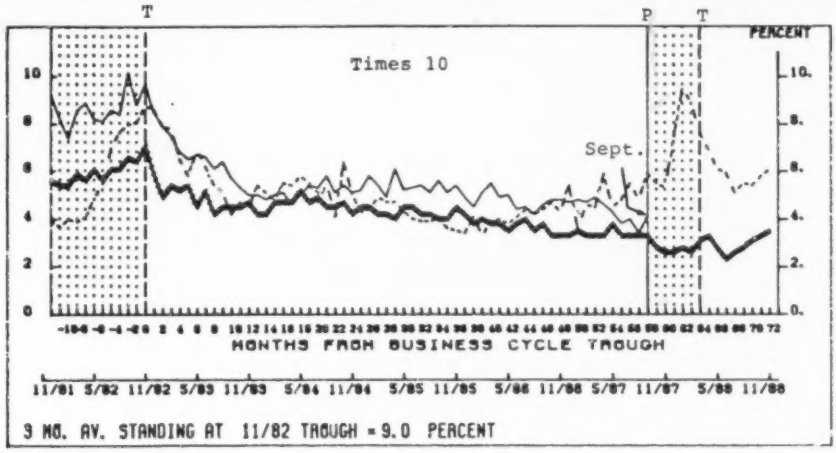


33. SHORT-DURATION UNEMPLOYMENT RATE



OTHER LEADING EMPLOYMENT INDICATORS

34. LAYOFF RATE UNDER 5 WEEKS


T
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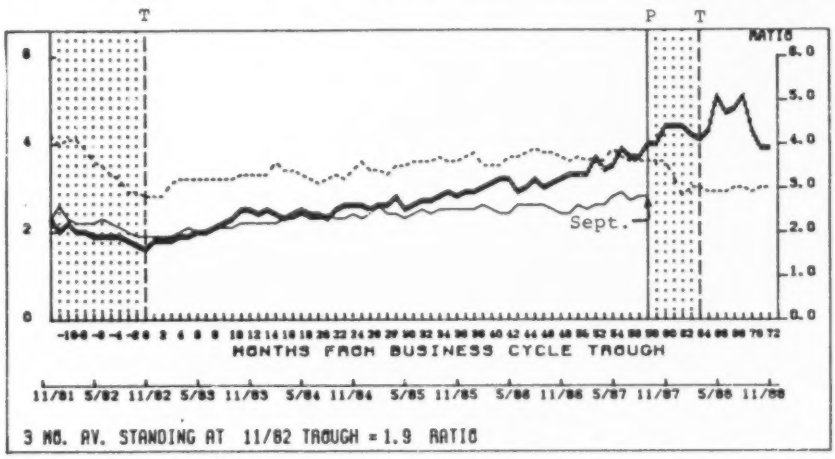
PERCENT
Times 10
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.0 PERCENT

35. VOLUNTARY TO INVOLUNTARY PART-TIME EMPLOYMENT RATIO


T
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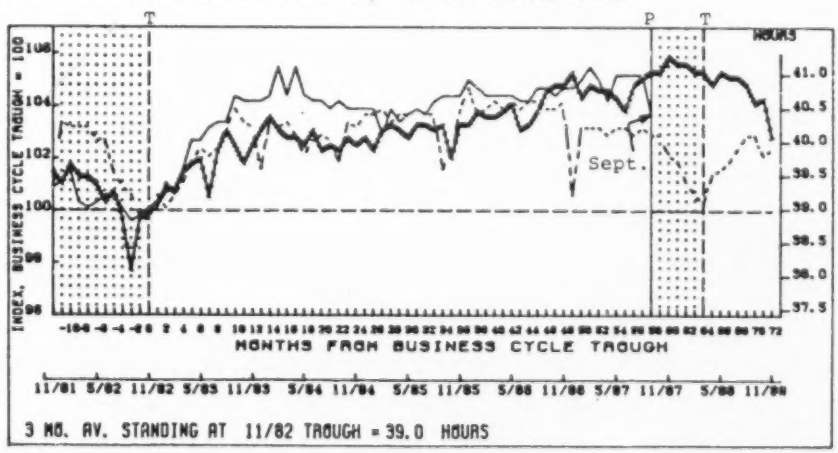
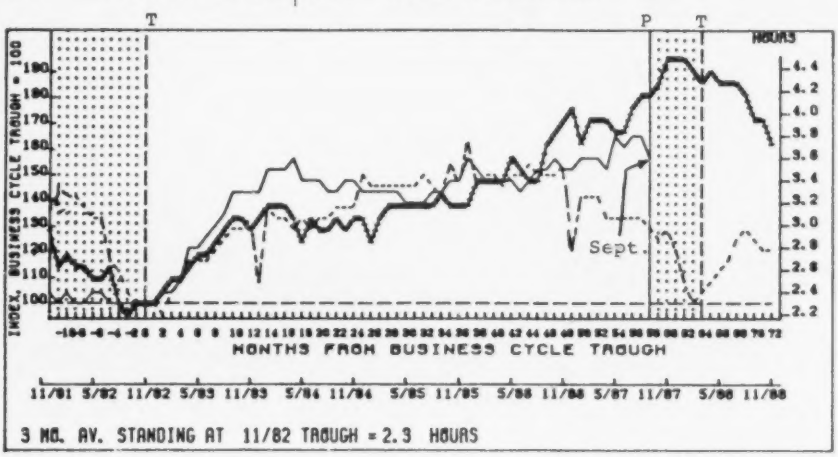
RATIO
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1.9 RATIO

36. AVERAGE WORKWEEK, MANUFACTURING


T
P
T
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 39.0 HOURS

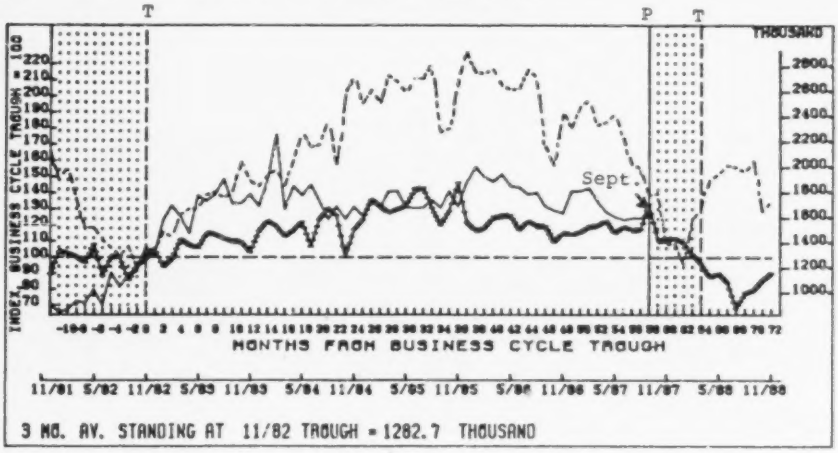
OTHER LEADING EMPLOYMENT INDICATORS, continued

37. OVERTIME HOURS, MANUFACTURING

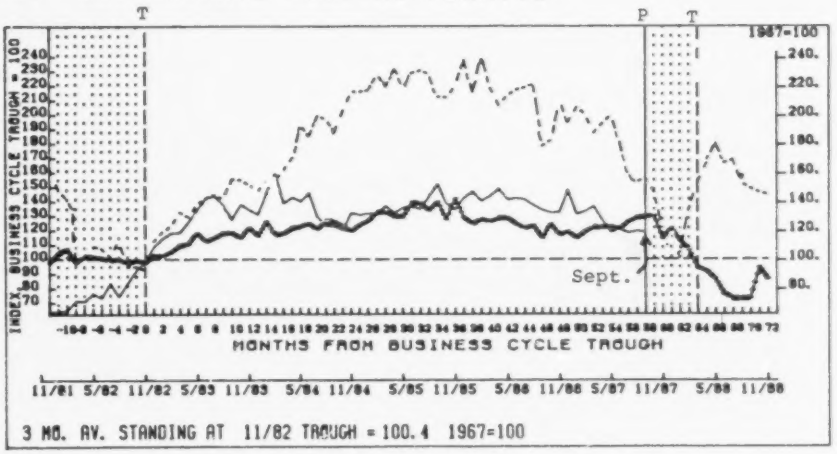

T
P
T
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2.3 HOURS

INVESTMENT COMMITMENTS AND INVENTORIES

38. NEW PRIVATE HOUSING STARTS


T
P
T
THOUSAND
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1282.7 THOUSAND

39. NEW PRIVATE HOUSING PERMITS


T
P
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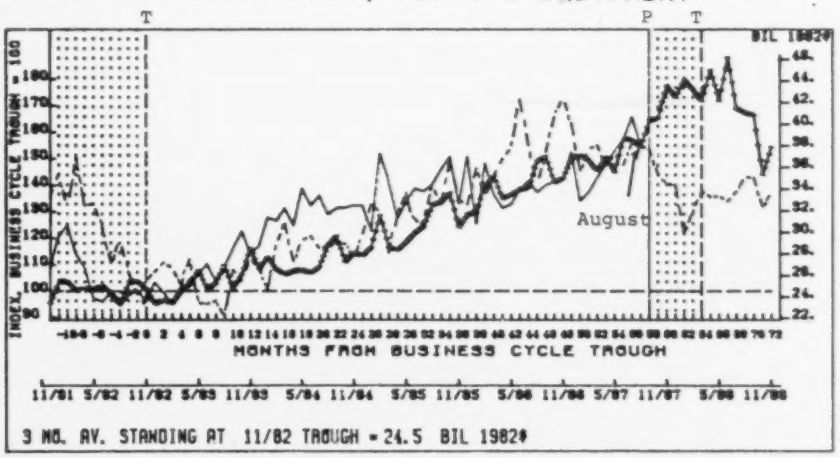
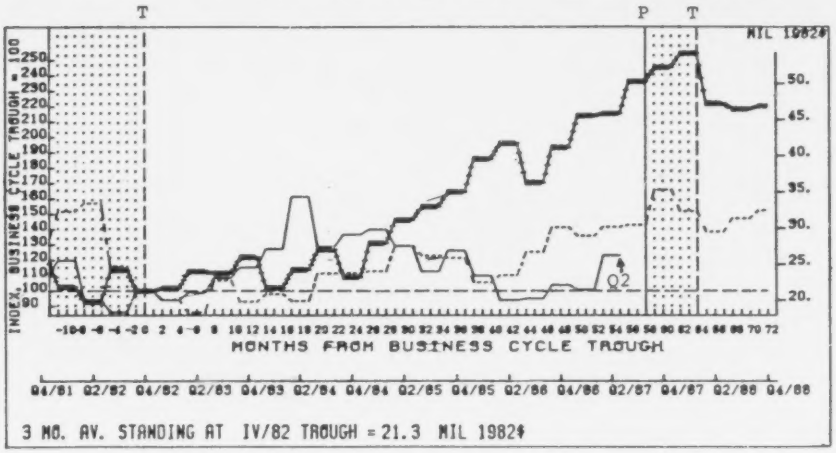
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 100.4 1967=100

40. CONTRACTS & ORDERS, PLANT & EQUIPMENT

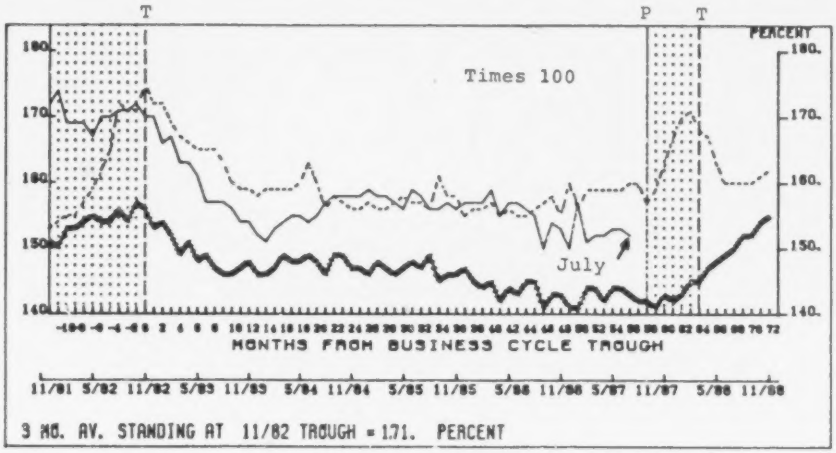

T
P
T
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
August
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 24.5 BIL 1982$

INVESTMENT COMMITMENTS AND INVENTORIES, continued

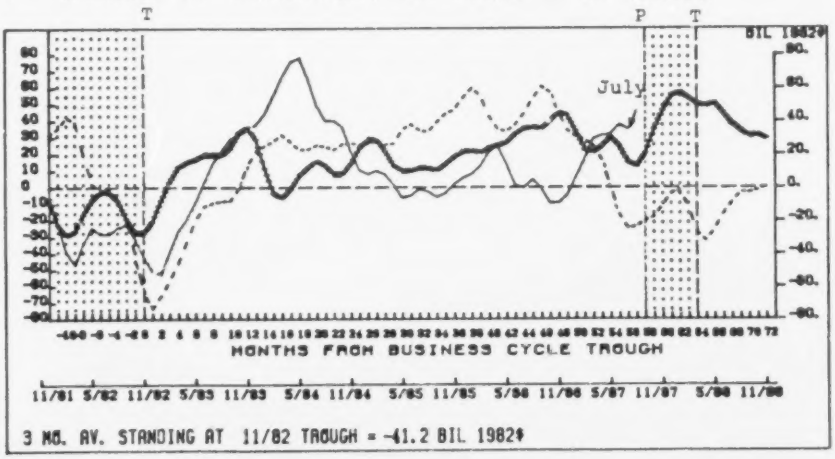
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING



42. INVENTORY/SALES RATIO, MANUFACTURING AND TRADE

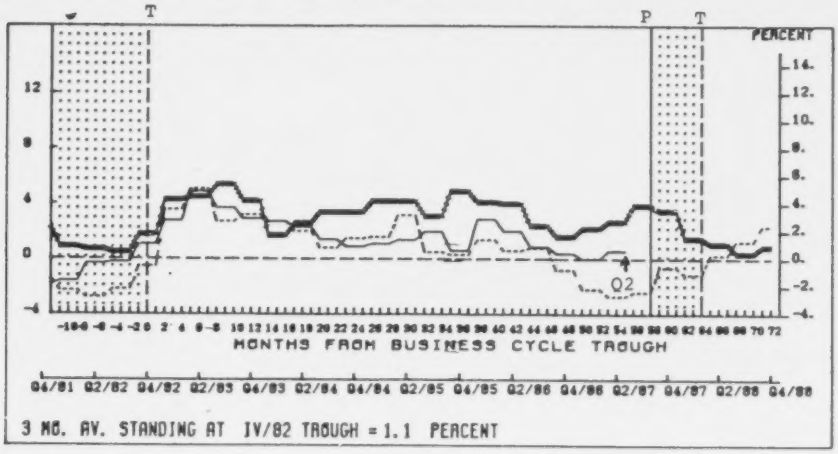


43. CHANGE IN INVENTORY ON HAND & ON ORDER

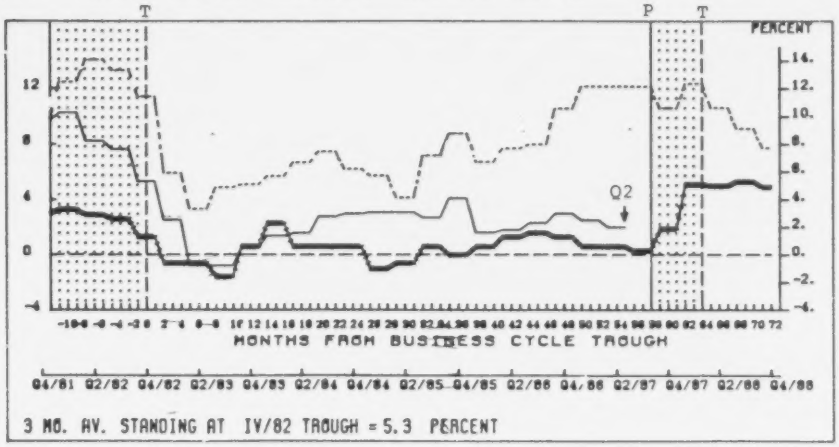


PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS

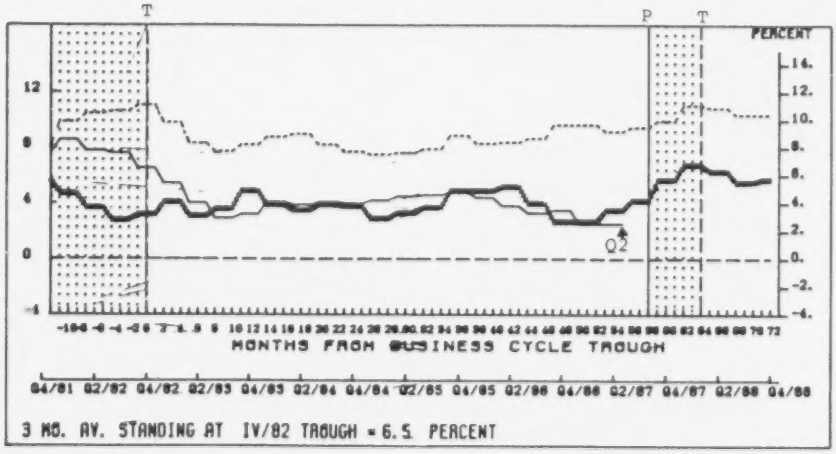
44. OUTPUT PER HOUR, GROWTH RATE



45. UNIT LABOR COSTS, GROWTH RATE

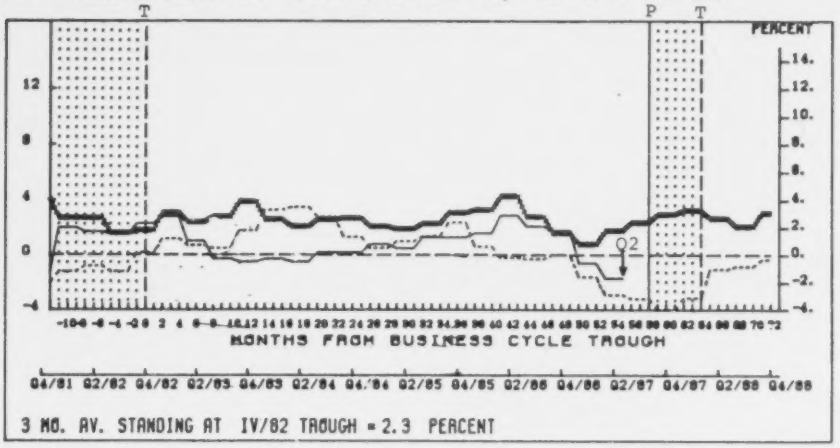


46. HOURLY COMPENSATION, GROWTH RATE

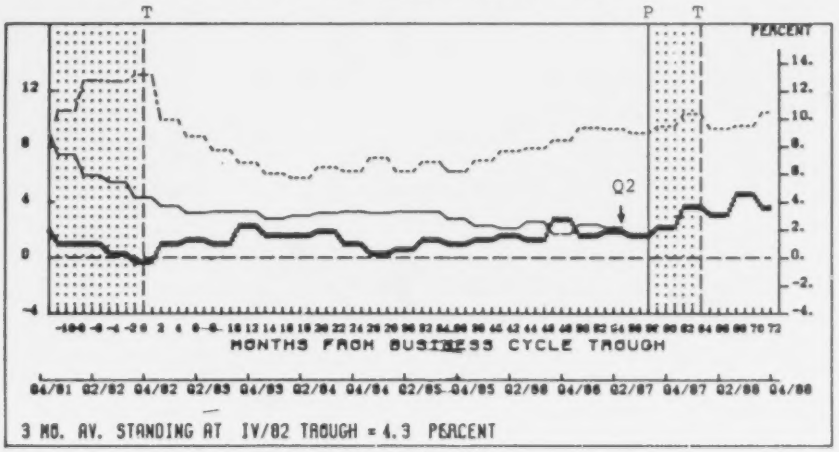


PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, continued

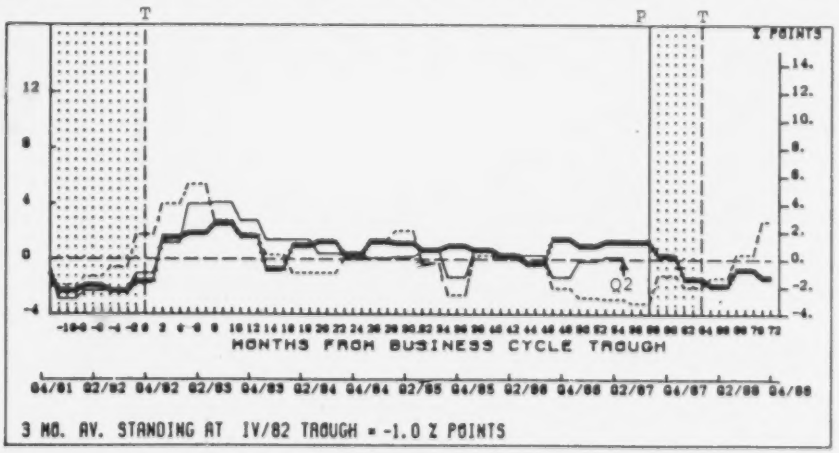
47. REAL HOURLY COMPENSATION, GROWTH RATE



48. SELLING PRICE INDEX, GROWTH RATE

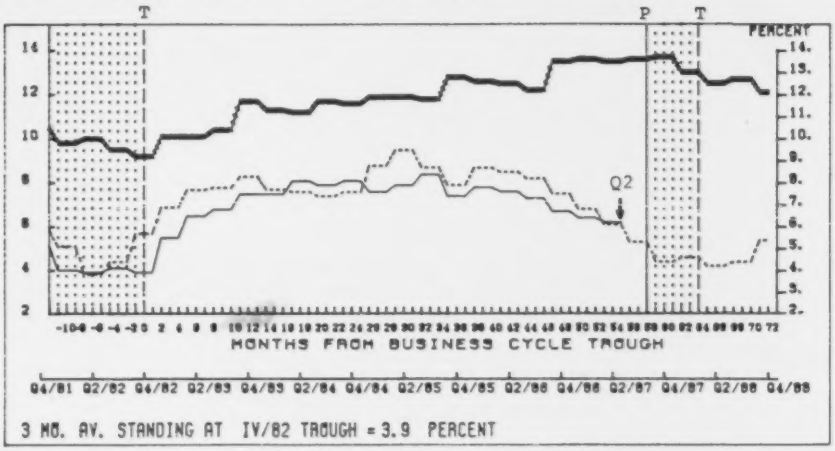


49. GROWTH RATE IN PRICES MINUS GROWTH RATE IN COSTS

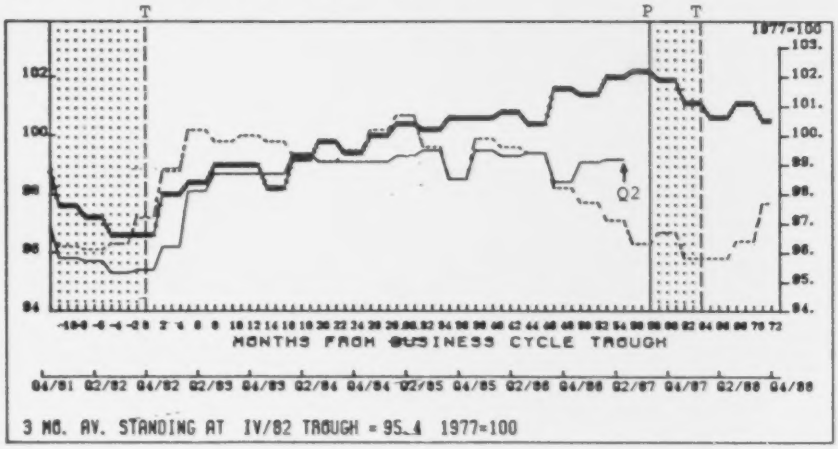


PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, continued

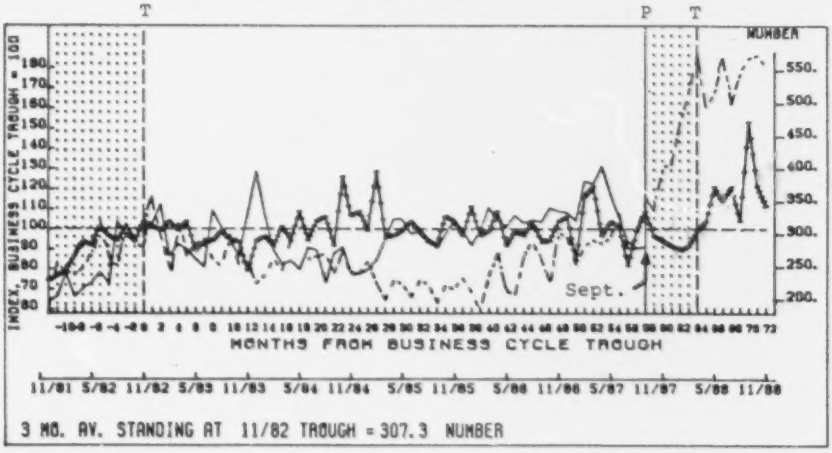
50. CORPORATE PROFIT MARGIN



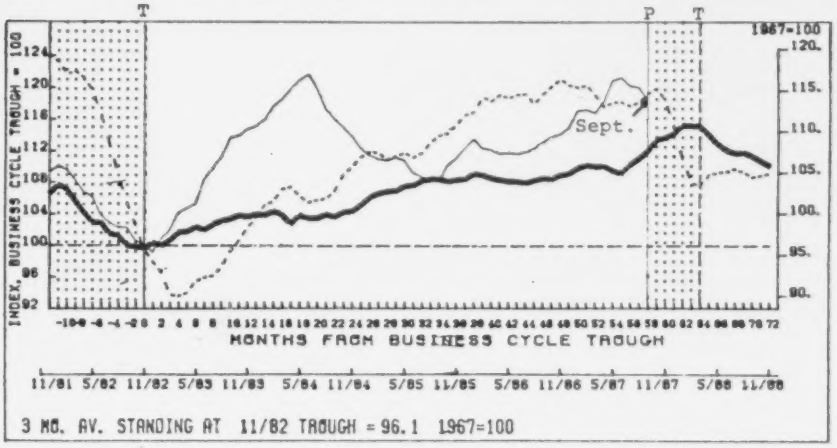
51. PRICE/LABOR COST RATIO



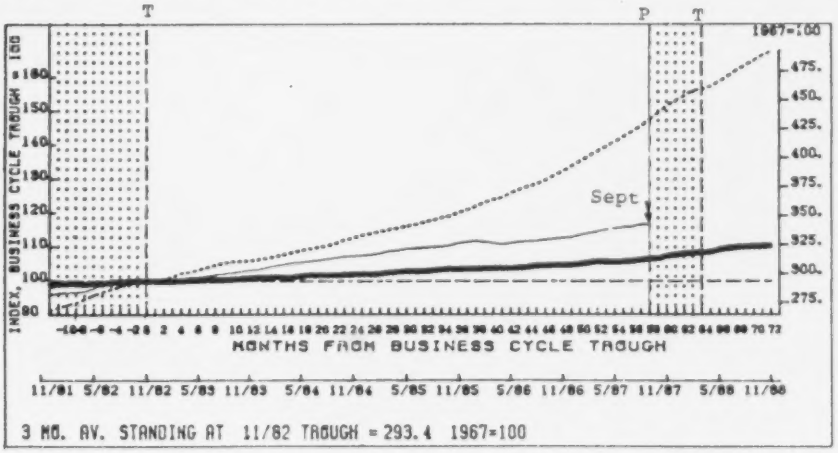
52. LARGE BUSINESS FAILURES



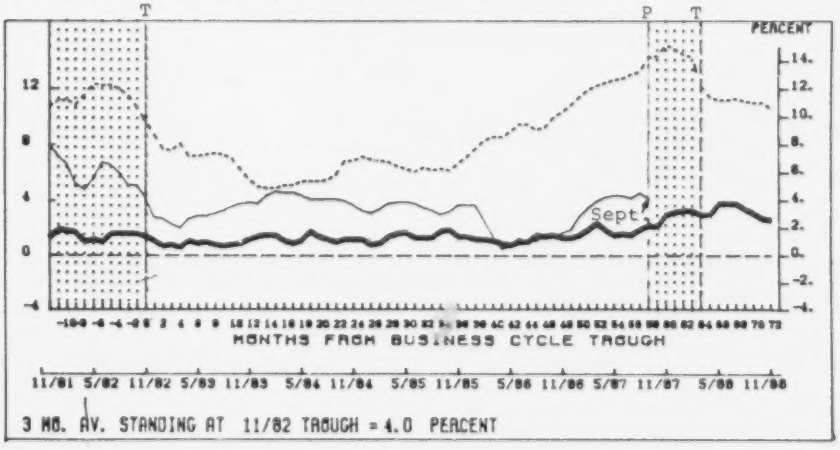
53. LEADING INDEX OF INFLATION (CIBCR)


T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 96.1 1967=100

54. CONSUMER PRICE INDEX

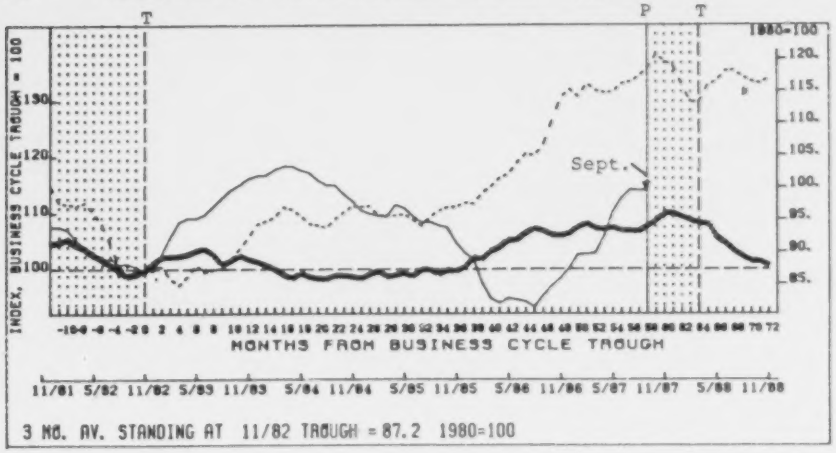

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Sept
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 293.4 1967=100

55. CONSUMER PRICE INDEX, GROWTH RATE

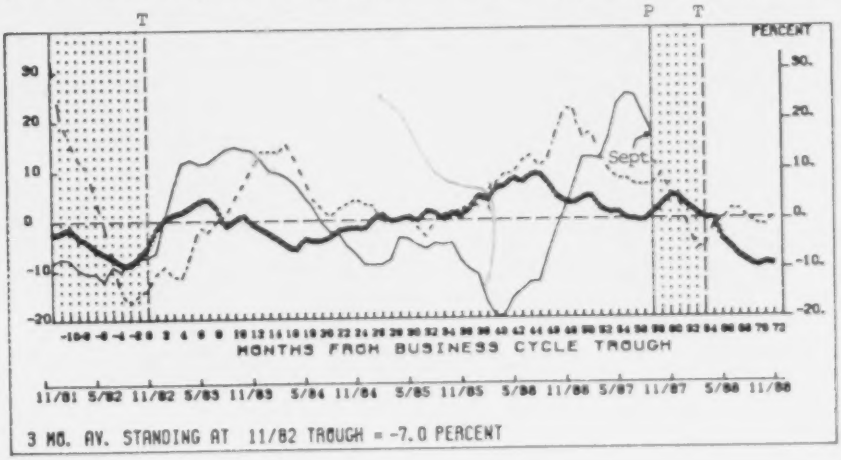

T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.0 PERCENT

PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, continued

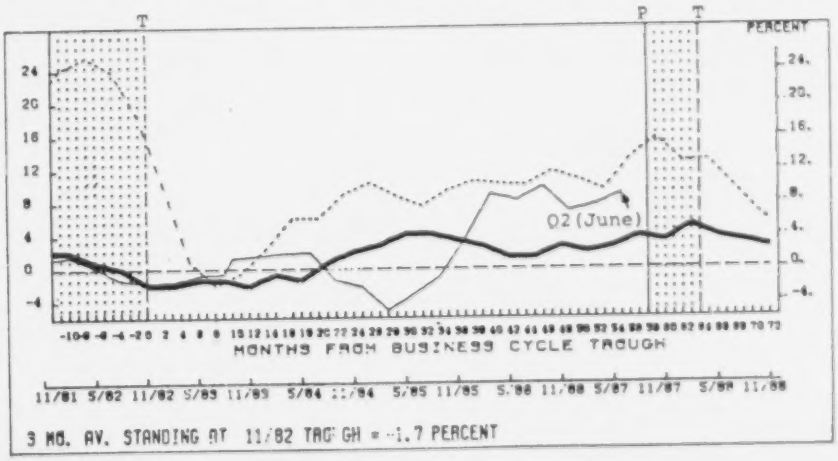
56. INDUSTRIAL MATERIALS PRICE INDEX


T
P
T
1980=100
INDEX, BUSINESS CYCLE TROUGH = 100
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 87.2 1980=100

57. INDUSTRIAL MATERIALS PRICE INDEX, GROWTH RATE

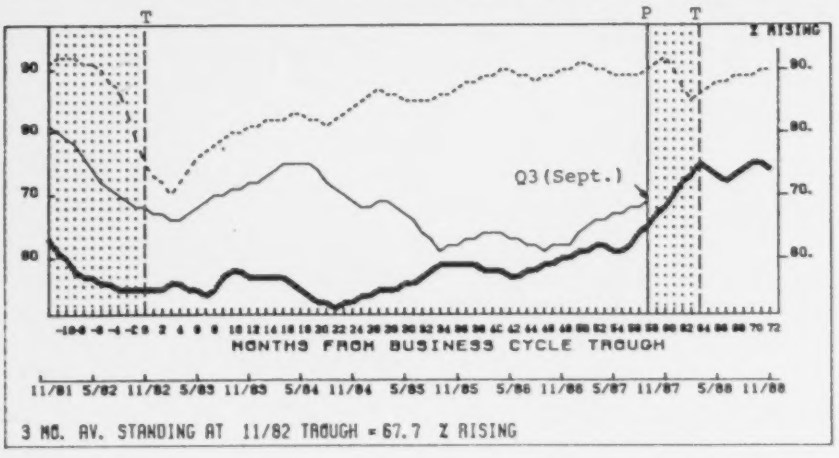

T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -7.0 PERCENT

58. IMPORT PRICE INDEX (EXCLUDING FUELS), GROWTH RATE


T
P
T
PERCENT
Q2 (June)
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -1.7 PERCENT

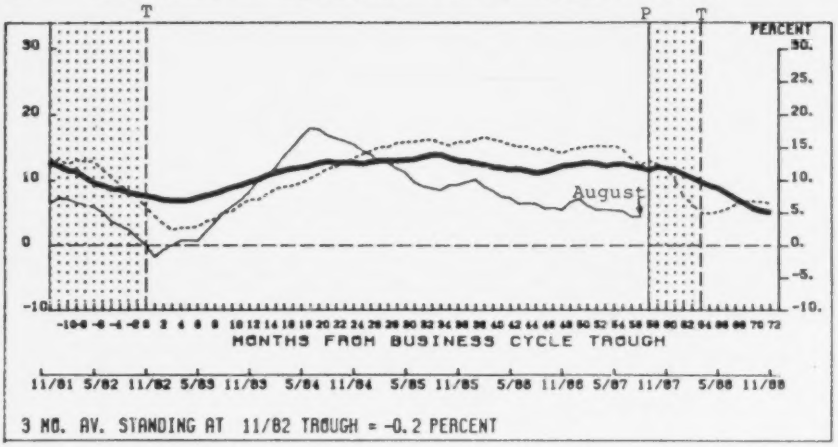
PRODUCTIVITY, WAGES, COSTS, PRICES AND PROFITS, continued

59. BUSINESSMEN'S ANTICIPATED SELLING PRICES (SURVEY)

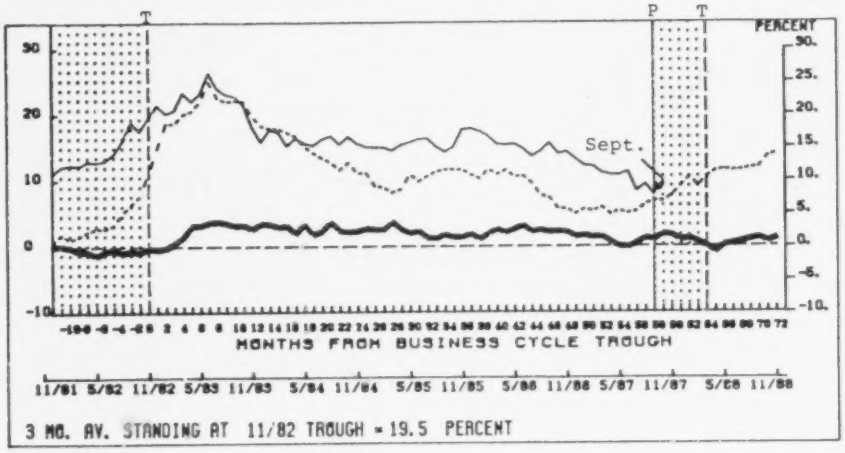


MONEY, CREDIT, INTEREST RATES AND STOCK PRICES

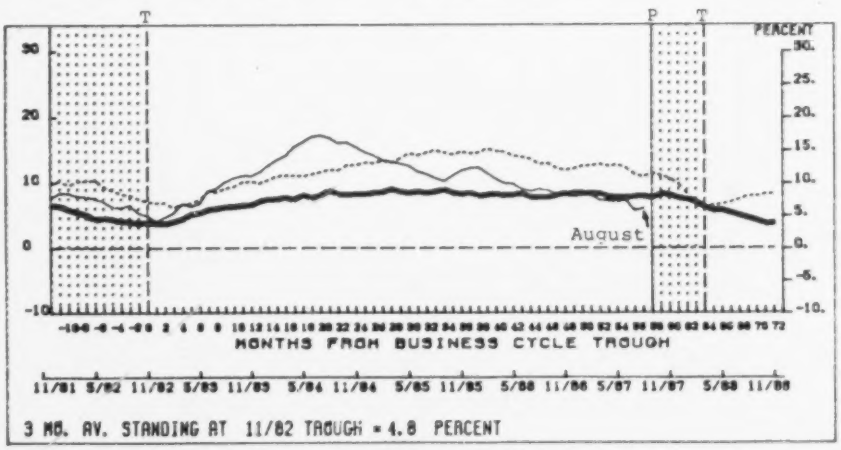
60. BUSINESS & CONSUMER DEBT, GROWTH RATE



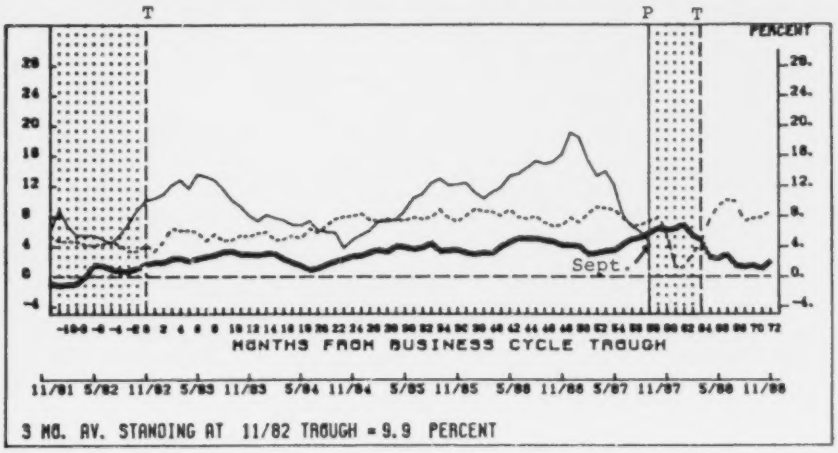
61. FEDERAL DEBT, GROWTH RATE



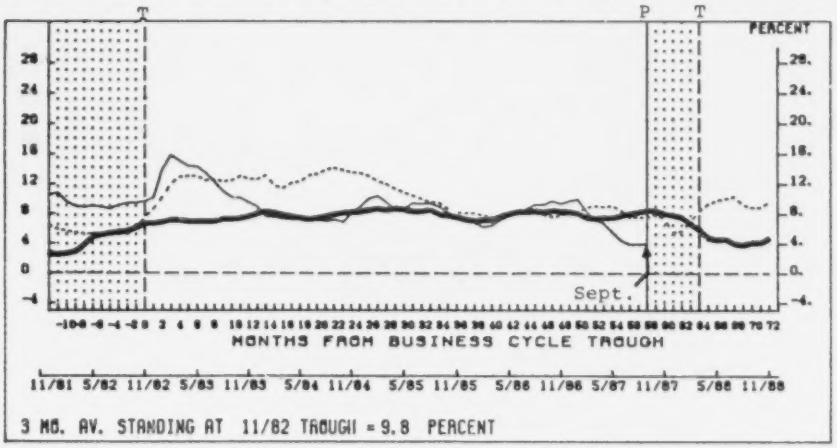
62. TOTAL DEBT, GROWTH RATE



63. MONEY SUPPLY (M1), GROWTH RATE


T
P
T
PERCENT
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.9 PERCENT

64. MONEY SUPPLY (M2), GROWTH RATE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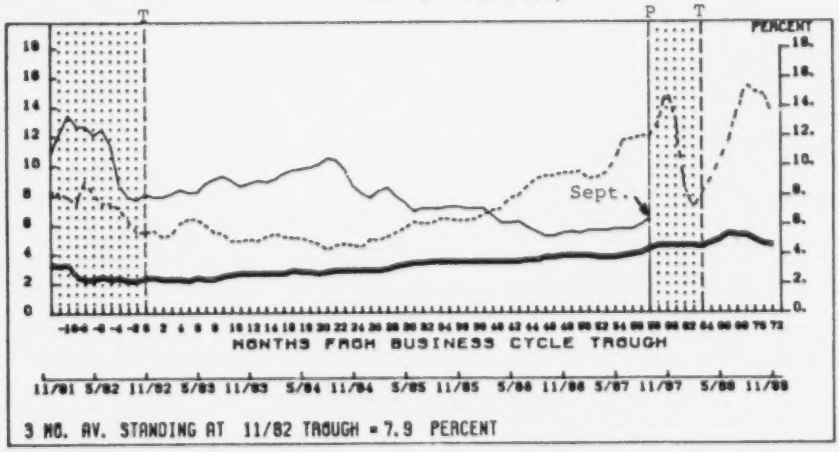
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.8 PERCENT

65. TREASURY BILL RATE (3-MONTH)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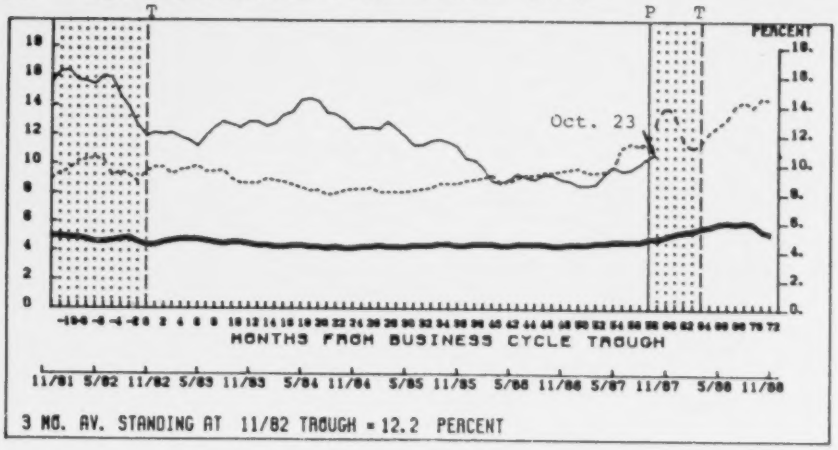
Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 7.9 PERCENT

MONEY, CREDIT, INTEREST RATES AND STOCK PRICES, continued

66. NEW CORPORATE BOND YIELD (AA)


T
P
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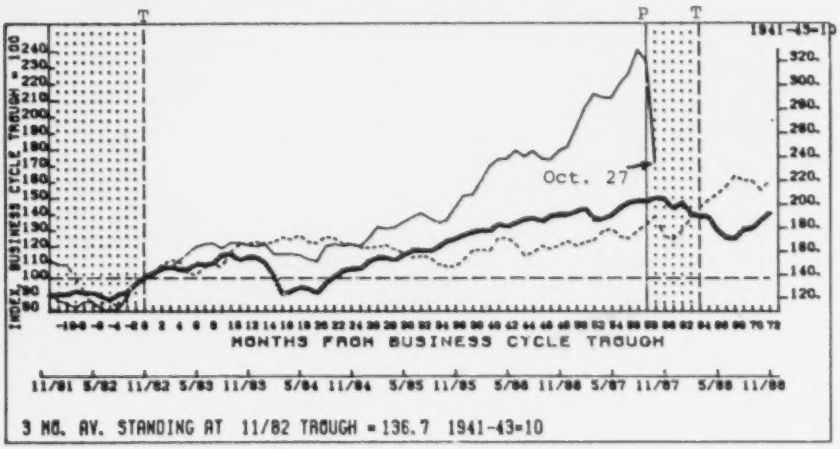
PERCENT
Oct. 23
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 12.2 PERCENT

67. COMMON STOCK PRICE INDEX (S&P 500)



ABOUT THE CENTER FOR INTERNATIONAL BUSINESS CYCLE RESEARCH

The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
323 Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1986 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

A Bimonthly Report Designed to Assist in the Evaluation of Current Business Conditions

Published by the Center for International Business Cycle Research, Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 9, No. 6
December 1987

Summary

The stock market crash has triggered an initial signal of slowdown or recession, according to the sequential signal system developed by the Center some years ago, based on the growth rate in the government's leading index for November. Some of the other leading indexes reported here show greater weakness while others exhibit more strength, so considerable uncertainty about the outlook remains. One of the supporting factors is the rapid growth in the real volume of U.S. exports. Meanwhile, the threat of inflation has subsided somewhat, with the leading index of inflation down a bit from its June peak, largely because of a flatter trend in materials prices.

We close this report with some words of advice from a policy-maker who faced a similar uncertain situation in the 1950's: Arthur F. Burns.

A New Signal of Recession

In 1980 the Center began developing a system of "sequential signals of recession and recovery" based on growth rates in the Commerce Department's leading and coincident indexes. The first signal of recession occurred when the six-month smoothed growth rate in the leading index first declined below 2.3%. The second signal required the leading index growth rate to fall below -1.0% and the coincident index growth rate to fall below 2.3%. The third signal was set off when the leading rate was below zero and the coincident below -1.0%. Tests of the signals during 1951-81 showed that the first signal identified every one of the seven business cycle peaks before it occurred by intervals ranging from one to nineteen months and averaging seven months. However, the first signal also identified three periods of slowdown in

economic growth (in 1951, 1962 and 1966). The second and third signals came later but were better at differentiating slowdowns from recessions.*

The November 1987 BCD leading index growth rate was 1.3%, well below the 2.3% level required for the first signal. This was the first month that the full effect of the stock market crash was recorded, because the stock price figures used in the index are monthly averages of daily data. Judging from the past record of the first signals, the implication is slowdown or recession in 1988 unless the signal is soon reversed. A reversal would occur if and when the leading index growth rate exceeded 4.3%. See Chart 9.

Contradictions Among the Leading Indexes

The leading indexes of the real economy are presenting a mixed picture, not all bright but not all gloomy. The most up-to-date index, now available through mid-December, is the Business Week leading index, and that shows a decline since June that matches its decline prior to the 1980 recession, as well as its decline prior to the mini-recession of 1966-67 (see Chart 1). From that evidence, we're in for either a slowdown or a recession. The long-leading index (Chart 1A) picked up a bit in November, but is still slightly below its July peak. It is saying slowdown ahead. The BCD leading index dropped in November, as noted above, but our leading employment index reached a new high on that date, and so did the NAPM leading index (Chart 1B, 2 and 4). Finally, the eight-country leading index, which bears on our export prospects, has been climbing vigorously, althougn the latest figures do not go beyond September (Chart 14).

Some of this variety is directly due to the October stock market crash, since stock prices are included in the Business Week index and the BCD index, but not in the long-leading index or the employment index. Since stocks are also in the eight-country index, that will be weaker in October and November, reflecting the fact that the crash was world-wide. In view of the sensitivity of the leading indicators to pending economic developments, the strength in the long-leading index and the leading employment index is encouraging. Through November, at least, their components showed little effect of the market's depressing action in October. The weekly index, however, which we have tested with stock prices removed, is not encouraging. Most of the weakness in the past three months or so has been from slower growth in industrial materials prices and real estate

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*See Chapter 4 in Business Cycles, Inflation and Forecasting, Geoffrey H. Moore, Ballinger Publishing Co, Cambridge, 1983.

loans, with an occasional downward push from higher bond yields. The other components (large business failures, the M2 money supply, and initial claims for unemployment insurance) have not displayed much strength, either.

The upshot, at best, is uncertainty. An outcome consistent with the evidence so far is slower growth in the real economy in 1988 than in 1987. Support seems likely to come from real export volume, as indeed it did in 1987. Between the third quarters of 1986 and 1987 exports in constant dollars rose 15%. That contributed 1.5 percentage points to the 3.2% growth in real GNP during that period, or nearly half. The decline in the dollar exchange rate and the strength of the eight-country leading index suggest that exports will continue to support the U.S. economy in 1988.

Inflation: A Smaller Push from Materials Prices

As for inflation, one of the more favorable factors in recent months has been the slower growth in industrial materials prices. The growth rate in these prices has had a rather good record as a leading indicator of the consumer price inflation rate. Last summer the Journal of Commerce index of industrial materials prices, which includes textiles, metals, crude oil, and other materials, was rising at an extraordinary 25% annual rate. By the end of December the rate was below 5%. Of course, the cost of materials is not the only factor influencing consumer prices, but it is encouraging to see the upward pressure from this source subsiding.

Other items included in our leading index of inflation are:

import prices, which continue to rise with the decline of the dollar;

the growth of debt, which has been slowing moderately;

the percentage of the population that is employed, which remained high through November;

the percentage of businessmen expecting prices to rise, which also remains high.

These factors to some extent offset the leveling of industrial materials prices, but the leading index nevertheless is down slightly from its peak last June. That is better than if it were still climbing, though it has not dropped as it did in the 1980 recession (Chart 53).

For further analysis of the inflation outlook, subscribers can request a recent CIBCR special report, "The Inflation Outlook."

A Timely Reminder on Recession Policy

The late Arthur F. Burns, long a student of business cycles, left some advice to policy makers on this subject. In 1953, when he was Chairman of President Eisenhower's Council of Economic Advisors and faced the prospect of a recession in 1953-54, he wrote these words about how to deal with such a threat:

"The first and foremost principle is to take preventive action...The second principle is to avoid a doctrinaire position, work simultaneously on several fronts, and make sure that the actions being taken harmonize and reinforce one another. The third basic principle is to pursue measures that will foster the expansion of private activity, by stimulating consumers to spend more money and businessmen to create more jobs...The fourth principle is to act promptly and vigorously if economic conditions require it...The need for constant vigilance and preparedness by Government does not, however, justify constant stirring or meddling. Minor variations in activity are bound to occur in a free economy, or for that matter in any type of economy."

This was written for the President's Economic Report published in January 1954, when signs of the 1953-54 recession were already apparent. The next year, when the recession was over, the January 1955 Report undertook to draw some lessons from "this latest encounter with the business cycle", namely:

"First, that wise and early action by Government can stave off serious difficulties later. Second, that contraction may be stopped in its tracks even when governmental expenditures and budget deficits are declining, provided effective means are taken for building confidence. Third, that monetary policy can be a powerful instrument of economic recovery, so long as the confidence of consumers and businessmen in the future remains high. Fourth, that automatic stabilizers, such as unemployment insurance and a tax system that is elastic with respect to the national income, can be of material aid in moderating cyclical fluctuations. Fifth, that a minor contraction in this country need not produce a severe depression abroad. Sixth, that an expanding world economy can facilitate our own readjustments."

History, someone said, repeats itself. So does the business cycle. The advice seems as sound today as thirty-five years ago.

RECESSION-RECOVERY SERIES AND CHARTS

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1B	N.A.P.M. Leading Index	12
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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover more than sixty indicators and give the information needed to compare the current expansion with two very long expansion since 1961. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business percentages of business cycle trough standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 60 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Actual Levels

		UNIT	Months After Business cycle Trough	Expansions Starting Feb. 1961	Expansions Starting Mar. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	60	3.0	-7.2	-4.9	NOV
6A.	LONG LEADING INDEX, GROWTH RATE	%	59	4.5	-13.0	1.7	OCT
6B.	N.A.P.M. INDEX, GROWTH RATE	%	60	8.4	-4.7	10.2	NOV
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	60	9.8	0.3	6.8	NOV
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	60	10.2	0.2	7.1	NOV
9.	LEADING INDEX, GROWTH RATE.	%	59	7.6	-5.3	4.5	OCT
10.	COINCIDENT INDEX, GROWTH RATE	%	59	9.9	-0.9	5.4	OCT
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	59	75.0	57.0	77.0	OCT
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	59	101.3	117.7	120.2	OCT
15.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	58	2.7	6.4	12.8	SEPT
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	19Q	7.8	0.7	3.5	Q3
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	60	57.2	60.1	62.0	NOV
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	60	89.2	51.9	78.9	NOV
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		60	41.4	68.2	80.0	NOV
30.	UNEMPLOYMENT RATE: TOTAL	%	60	3.7	6.2	5.8	NOV
31.	UNEMPLOYMENT RATE: INSURED	%	60	2.6	3.4	2.1	NOV
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	60	2.9	5.0	4.3	NOV
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	60	2.6	5.3	3.5	NOV
35.	PART-TIME EMPLOYMENT RATIO	%	60	4.4	3.6	2.6	NOV
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	58	14.2	16.0	15.0	SEPT
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	59	20.7	-19.7	15.8	SEPT
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	19Q	3.9	-2.4	1.9	Q3
45.	UNIT LABOR COSTS, GROWTH RATE	%	19Q	0.3	12.2	1.1	Q3
46.	HOURLY COMPENSATION, GROWTH RATE	%	19Q	4.2	9.5	3.1	Q3
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	19Q	2.4	-3.2	-1.3	Q3
48.	SELLING PRICE INDEX, GROWTH RATE	%	19Q	1.6	9.0	2.6	Q3
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	19Q	1.3	-3.2	1.5	Q3
50.	CORPORATE PROFIT MARGIN	%	18Q	13.5	6.1	6.2	Q2
51.	PRICE/LABOR COST RATIO	1977=100	19Q	102.2	96.3	99.9	Q3
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	59	2.1	14.4	4.3	OCT
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	60	4.7	5.6	8.8	NOV
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	58	3.7	14.9	7.5	Q3(SEPT)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	58	65.0	90.0	69.0	Q3(SEP)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	59	12.1	12.5	5.4	NOV
61.	FEDERAL DEBT, GROWTH RATE	%	60	1.7	7.6	8.5	NOV
62.	TOTAL DEBT, GROWTH RATE	%	59	8.4	11.1	6.8	OCT
63.	MONEY SUPPLY (M1), GROWTH RATE	%	60	6.2	5.9	3.3	NOV
64.	MONEY SUPPLY (M2), GROWTH RATE	%	60	8.1	7.3	3.7	NOV
65.	TREASURY BILL RATE (3-MONTH)	%	60	4.6	15.2	5.7	NOV
66.	NEW CORPORATE BOND YIELD (AA)	%	60	5.1	14.1	10.9	NOV

TABLE 2

RECESSION-RECOVERY STATUS UP TO 60 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Percentage Change from Trough Levels

	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes					
1. BUSINESS WEEK LEADING INDEX (CIBCR)	60	31.3	25.8	44.4	NOV
1A. LONG LEADING INDEX (CIBCR)	59	54.8	14.9	55.6	OCT
1B. N.A.P.M. INDEX	60	40.1	27.1	29.6	OCT
2. LEADING EMPLOYMENT INDEX (CIBCR)	60	39.5	26.6	36.3	NOV
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)	60	38.3	41.2	41.8	NOV
4. LEADING INDEX (BCD)	59	39.4	29.0	37.8	OCT
5. COINCIDENT INDEX (BCD)	59	39.6	31.7	30.0	OCT
12. LAGGING INDEX (BCD)	59	21.0	8.1	19.0	OCT
14. EIGHT-COUNTRY LEADING INDEX (CIBCR)	58	7.9	27.1	33.4	SEPT
II. Output, Income and Sales					
16. REAL GNP	190	28.5	21.1	21.4	Q3
18. INDUSTRIAL PRODUCTION INDEX	60	49.7	34.6	31.3	NOV
19. REAL PERSONAL INCOME	59	27.6	19.4	19.1	OCT
20. REAL CONSUMER EXPENDITURES	58	26.3	20.7	20.9	OCT
21. REAL RETAIL SALES	59	31.1	19.6	24.8	OCT
III. Employment and Unemployment					
22. TOTAL EMPLOYMENT	60	9.7	16.6	14.4	NOV
24. NONFARM EMPLOYMENT	60	17.4	18.9	16.4	NOV
25. NONFARM EMPLOYEE-HOURS	60	18.5	17.4	17.0	NOV
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES.	60	16.2	16.7	9.5	NOV
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	60	18.1	19.8	18.8	NOV
32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	60	-45.3	-17.3	-50.3	NOV
36. AVERAGE WORKWEEK, MANUFACTURING	60	5.9	2.1	5.7	NOV
37. OVERTIME HOURS, MANUFACTURING	60	95.2	29.2	69.6	NOV
IV. Investment Commitments and Inventories					
38. NEW PRIVATE HOUSING STARTS	60	11.1	8.2	27.6	NOV
39. NEW PRIVATE HOUSING PERMITS	60	14.2	20.6	15.4	NOV
40. CONTRACT & ORDERS, PLANT & EQUIPMENT	59	65.5	43.7	59.1	OCT
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING	190	136.3	43.2	42.9	Q3
V. Productivity, Wages, Costs, Prices and Profits					
52. LARGE BUSINESS FAILURES	60	-5.8	31.1	-0.1	NOV
53. LEADING INDEX OF INFLATION (CIBCR)	59	13.5	20.0	19.1	OCT
54. CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	59	6.8	49.6	17.4	NOV
56. INDUSTRIAL MATERIALS PRICE INDEX	60	10.0	37.1	12.7	OCT
VI. Money, Credit, Interest Rates and Stock Prices					
67. STOCK PRICE INDEX (S&P 500)	60	49.5	26.3	79.2	NOV

TABLE 3

RECESSION-RECOVERY STATUS UP TO 60 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Differences from Trough Levels

		Unit	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	60	-3.5	-1.9	-9.4	NOV
6A.	LONG LEADING INDEX, GROWTH RATE	%	59	-0.1	-12.9	-14.7	OCT
6B.	N.A.P.M. INDEX, GROWTH RATE	%	60	8.5	13.0	13.4	NOV
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	60	12.0	10.2	6.0	NOV
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	60	18.2	16.9	15.0	NOV
9.	LEADING INDEX, GROWTH RATE.	%	59	6.3	8.2	-0.1	OCT
10.	COINCIDENT INDEX, GROWTH RATE	%	59	16.7	14.2	12.4	OCT
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	59	38.3	39.3	30.3	OCT
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	59	13.5	21.1	10.2	OCT
15.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	58	-1.0	18.5	13.1	SEPT
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	190	7.2	5.7	4.6	Q3
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	60	0.9	3.6	4.3	NOV
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	60	68.9	37.8	57.5	NOV
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		60	-50.1	-33.0	-104.0	NOV
30.	UNEMPLOYMENT RATE: TOTAL	%	60	-2.9	-2.1	-4.7	NOV
31.	UNEMPLOYMENT RATE: INSURED	%	60	-3.7	-2.9	-2.9	NOV
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	60	-1.8	-1.0	-2.2	NOV
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	60	-3.8	-3.2	-5.5	NOV
35.	PART-TIME EMPLOYMENT RATIO	%	60	4.4	3.6	2.6	NOV
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	58	-1.3	-1.6	-2.1	SEPT
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	58	45.8	39.5	57.0	SEPT
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	190	2.1	-1.9	0.8	Q3
45.	UNIT LABOR COSTS, GROWTH RATE	%	190	-1.0	0.8	-4.2	Q3
46.	HOURLY COMPENSATION, GROWTH RATE	%	190	1.0	-1.6	-3.4	Q3
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	190	0.6	-3.4	-3.6	Q3
48.	SELLING PRICE INDEX, GROWTH RATE	%	190	1.9	-4.2	-1.7	Q3
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	190	2.9	-5.0	2.5	Q3
50.	CORPORATE PROFIT MARGIN	%	180	4.3	0.4	2.3	Q2
51.	PRICE/LABOR COST RATIO	1977=100	190	5.6	-0.9	4.5	Q3
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	59	0.7	4.7	0.3	OCT
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	60	9.4	18.7	15.8	NOV
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	58	5.5	-0.7	9.2	Q3(SEPT)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	58	10.0	14.3	1.3	Q3(SEP)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	59	4.5	6.6	5.6	NOV
61.	FEDERAL DEBT, GROWTH RATE	%	60	2.2	-3.7	-11.0	NOV
62.	TOTAL DEBT, GROWTH RATE	%	59	4.6	3.9	2.0	OCT
63.	MONEY SUPPLY (M1), GROWTH RATE	%	60	4.6	2.2	-6.6	NOV
64.	MONEY SUPPLY (M2), GROWTH RATE	%	60	1.6	-0.2	-6.1	NOV
65.	TREASURY BILL RATE (3-MONTH)	%	60	2.3	9.7	-2.2	NOV
66.	NEW CORPORATE BOND YIELD (AA)	%	60	0.6	4.7	-1.3	NOV

HOW TO READ CHARTS

ACTUAL LEVEL CHARTS

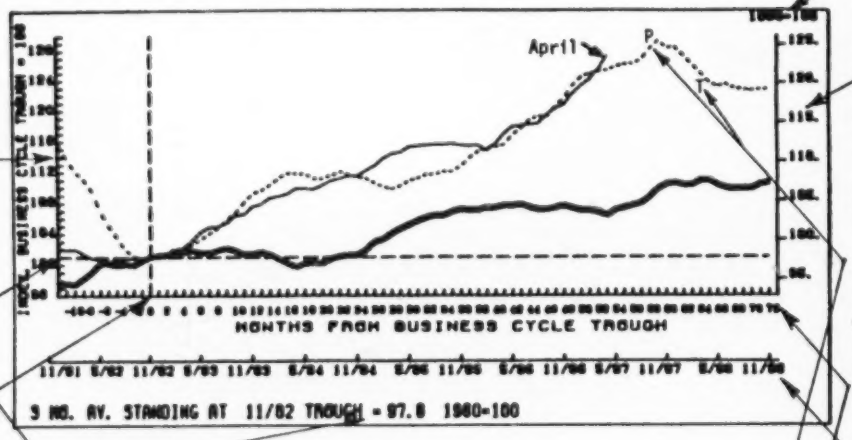
TITLE: If the title does not say "growth rate," then the chart is for the actual level, rather than the growth rate.

LEFT-HAND SCALE measures movements of both current and past expansions, relative to their standing at the respective reference troughs (i.e. for each expansion the standing at the trough equals 100). This is the common vertical scale along which the expansions are compared.

HORIZONTAL DOTTED LINE shows level at reference trough (100) for current and past expansions.

VERTICAL DOTTED LINE represents reference trough dates for current and past expansions, which are all aligned so that the reference trough dates are positioned on the vertical line.

STANDING AT THE TROUGH for the current expansion (when the expansion began) is typically calculated as the 3-month average centered on the trough month.



UNIT for right-hand scale, which refers only to the current expansion.

RIGHT-HAND SCALE refers only to current expansion. It is a transformation of the left hand scale to show the current expansion in original units rather than with trough standing = 100.

P indicates the January 1980 PEAK, marking the start of the 1980 recession, which lasted till the July 1980 TROUGH, indicated by T.

HORIZONTAL SCALE measures months from business cycle trough for both the current and the past expansions. This is the common time scale along which the recoveries are compared.

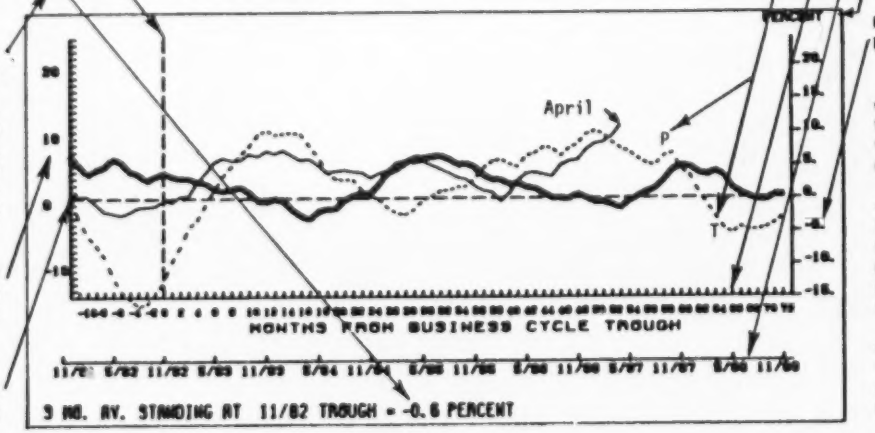
ACTUAL DATES, referring only to the current expansion.

GROWTH RATE CHARTS

TITLE: If the title says "growth rate," then the chart is for the "6-month smoothed growth rate," rather than the actual level. These growth rates are obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

LEFT-HAND SCALE, (same as the right-hand scale) shows growth rates in percent for both current and past expansions.

HORIZONTAL DOTTED LINE is drawn typically at 0% growth rate, a natural reference level for both current and past expansions.



UNIT for both scales (percent), referring to both current and past growth rates in expansions.

RIGHT-HAND SCALE, which refers to both current and past expansions.

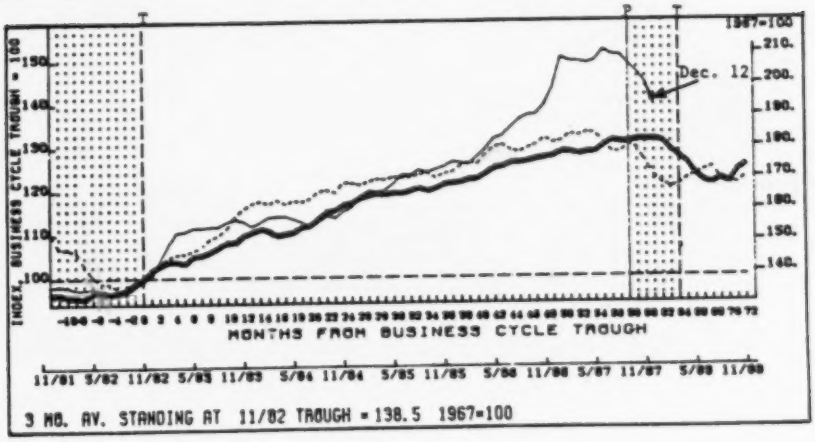
THICK LINE indicates 1961-69 expansion (from February 1961) which continued for 106 months.

DOTTED LINE indicates the 1975-80 expansion (from Mar. 1975), which ended after 58 months, and the subsequent recession (from January 1980 to July 1980).

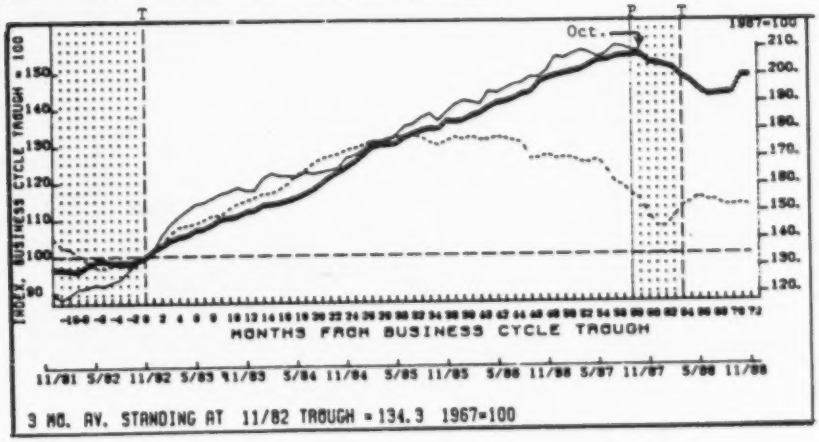
THIN LINE indicates the current expansion (business cycle trough: November 1982 or IV Q 1982).

COMPOSITE INDEXES

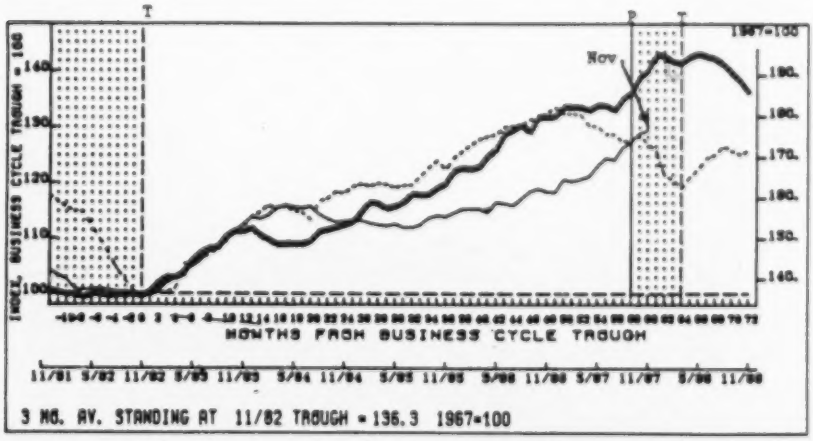
1. BUSINESS WEEK LEADING INDEX (CIBCR)



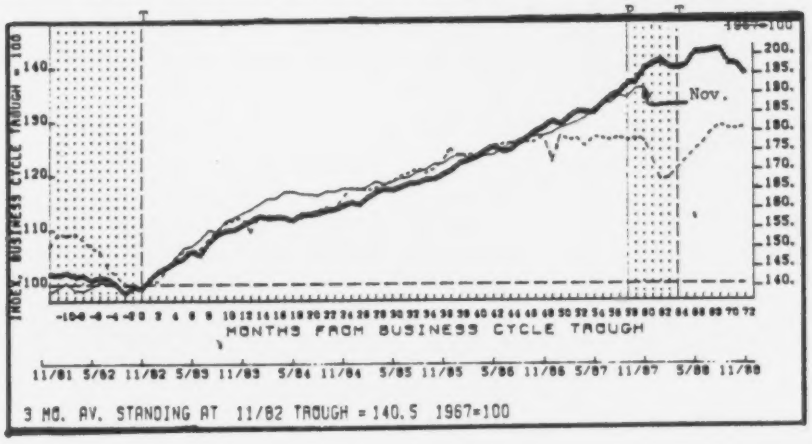
1A. LONG-LEADING INDEX (CIBCR)



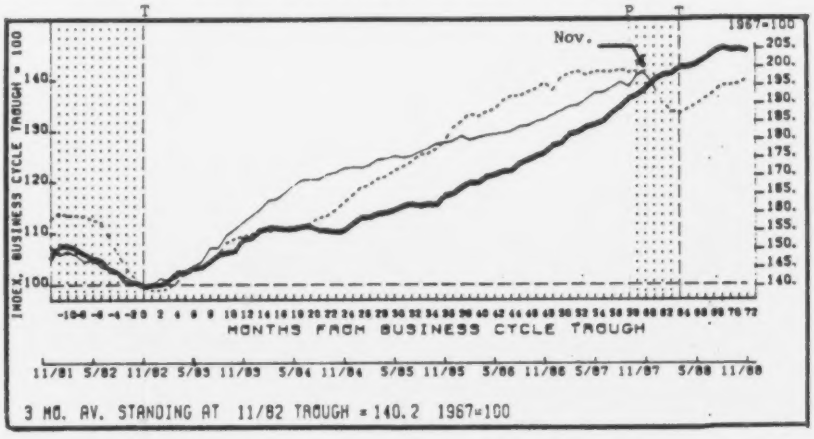
1B. N.A.P.M. LEADING INDEX



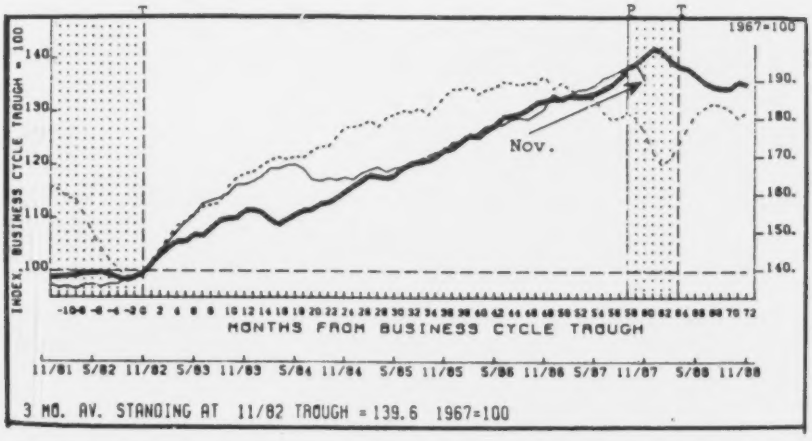
2. LEADING EMPLOYMENT INDEX (CIBCR)



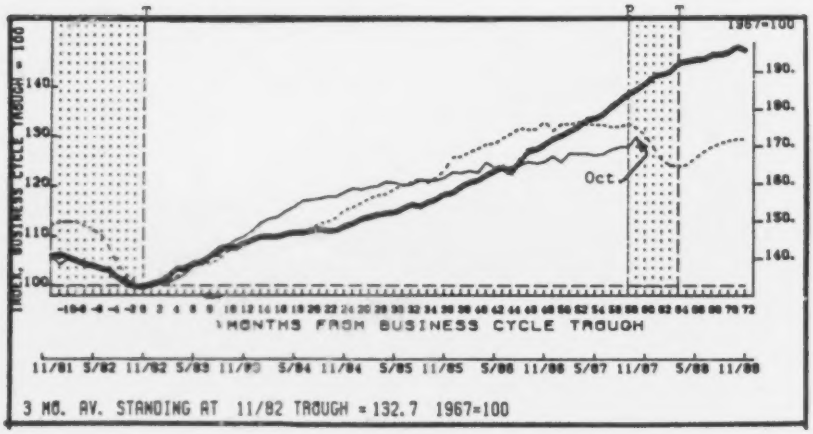
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)



4. LEADING INDEX (BCD)

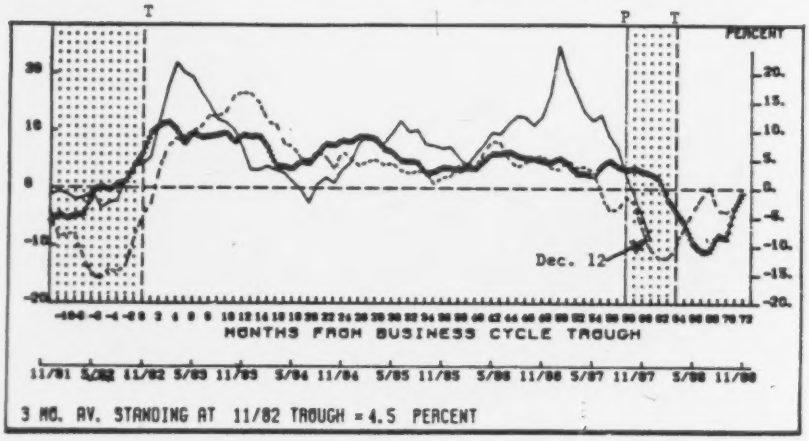


5. COINCIDENT INDEX (BCD)

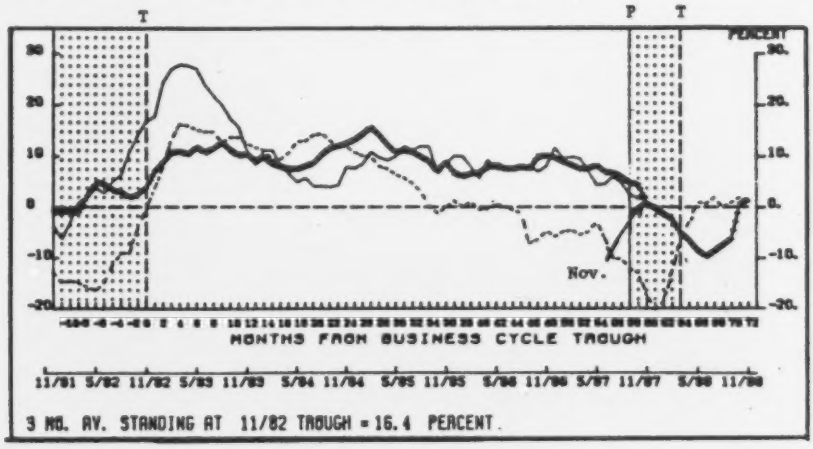


COMPOSITE INDEX GROWTH RATES

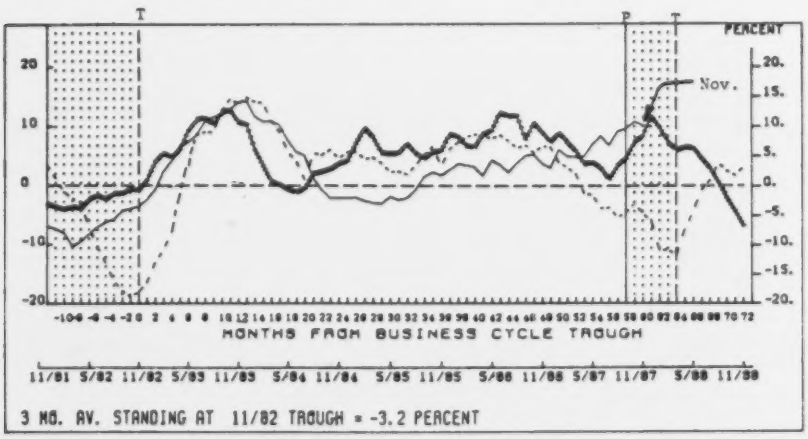
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
Dec. 12
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.5 PERCENT

6A. LONG-LEADING INDEX, GROWTH RATE

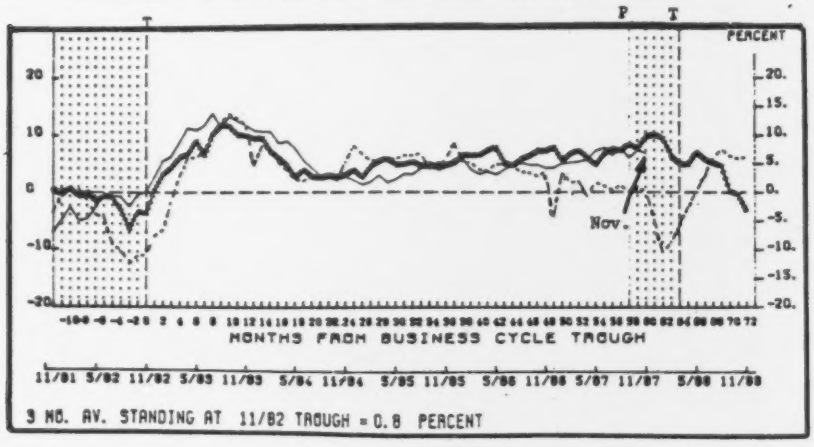

T
P
T
PERCENT
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 16.4 PERCENT.

6B. N.A.P.M. LEADING INDEX, GROWTH RATE

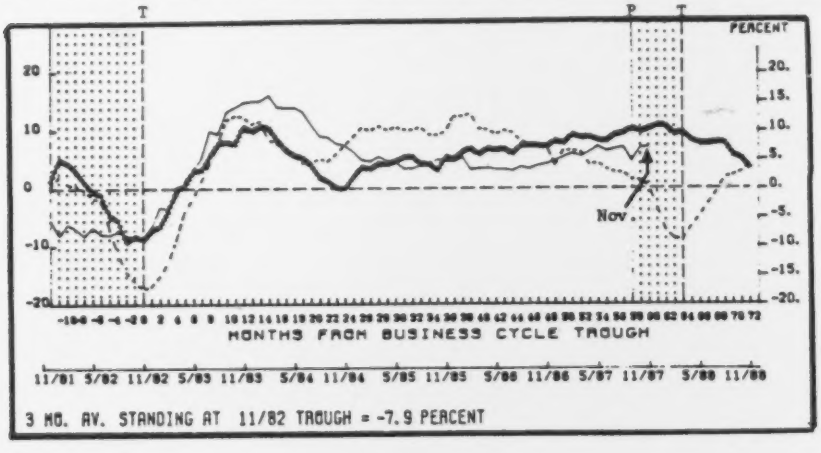

T
P
T
PERCENT
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -3.2 PERCENT

COMPOSITE INDEX GROWTH RATES, continued

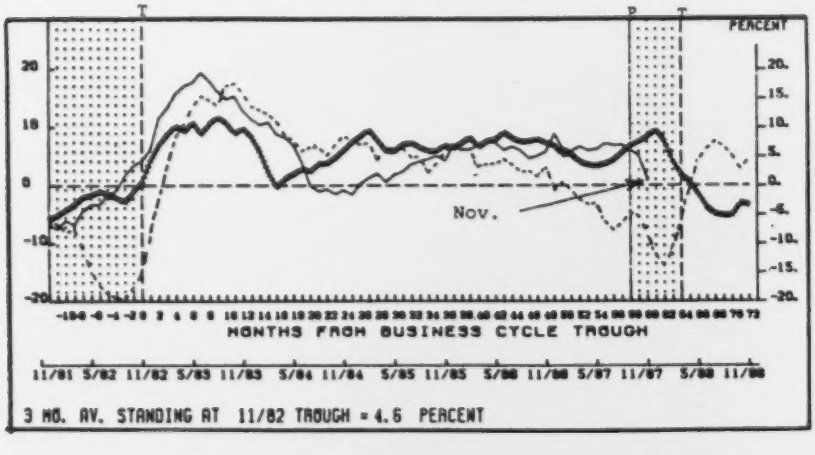
7. LEADING EMPLOYMENT INDEX, GROWTH RATE



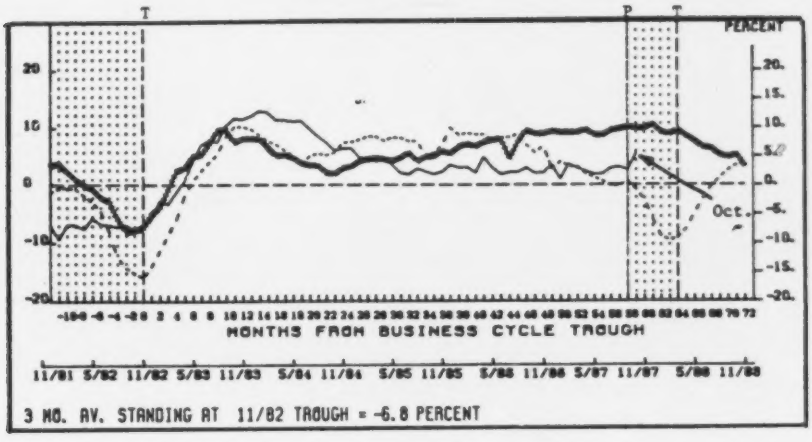
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE (CIBCR)



9. LEADING INDEX, GROWTH RATE (BCD)

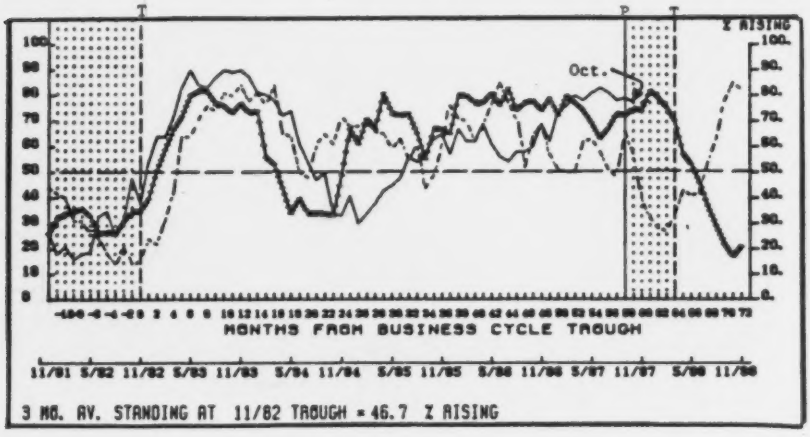


10. COINCIDENT INDEX, GROWTH RATE (BCD)

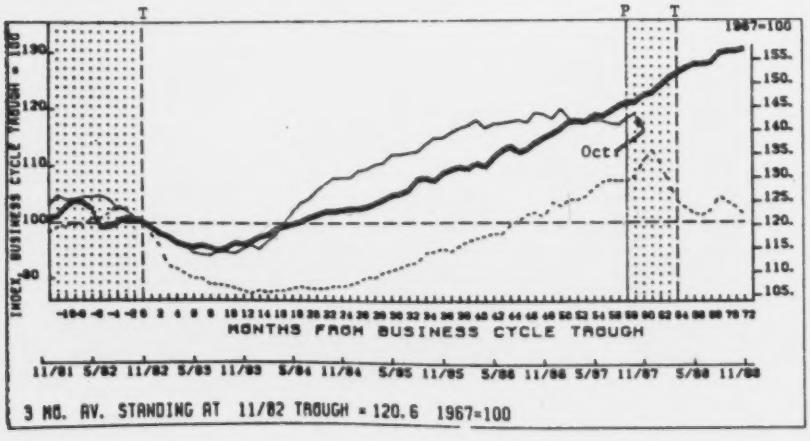


OTHER COMPOSITE INDEXES

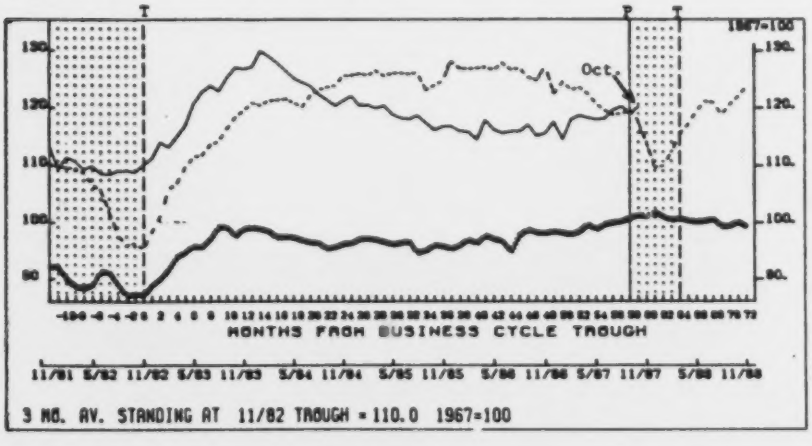
11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)


T
P
T
% RISING
Oct.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 46.7 % RISING

12. LAGGING INDEX (BCD)

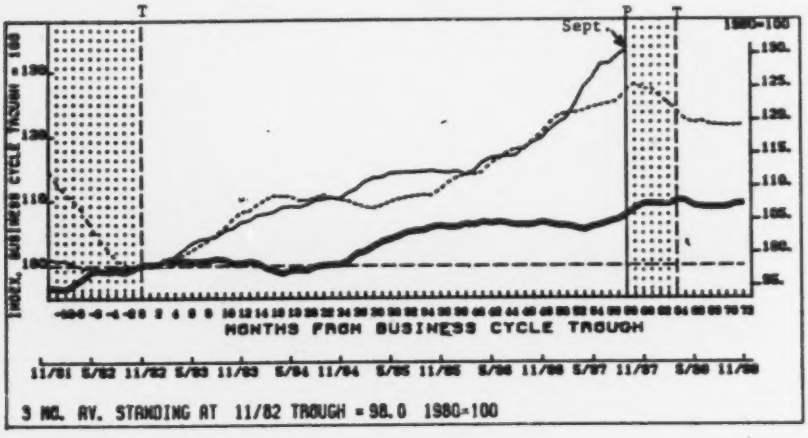


13. RATIO, COINCIDENT TO LAGGING INDEX

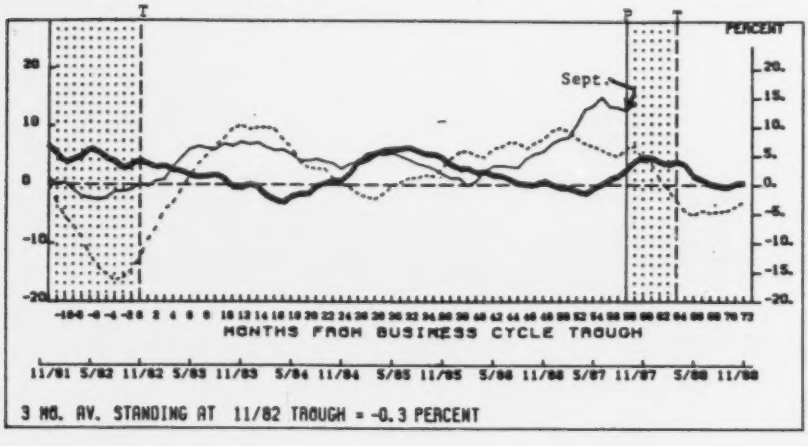


OTHER COMPOSITE INDEXES

14. EIGHT-COUNTRY LEADING INDEX (CIBCR)*



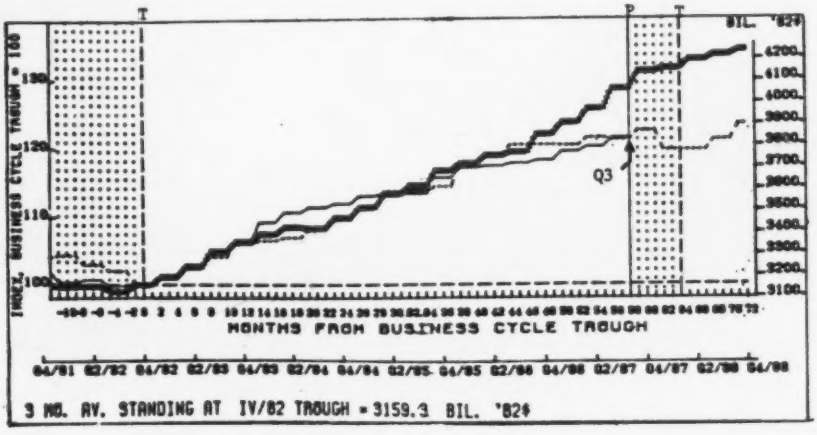
15. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE



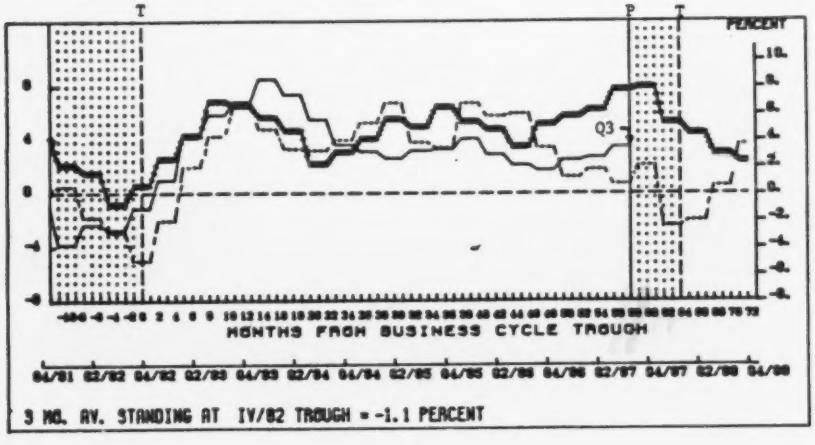
*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia & Taiwan.

OUTPUT, INCOME AND SALES

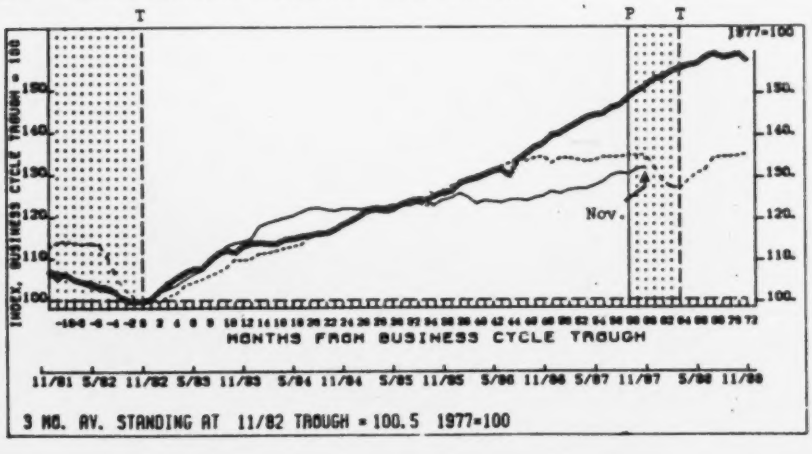
16. REAL GNP



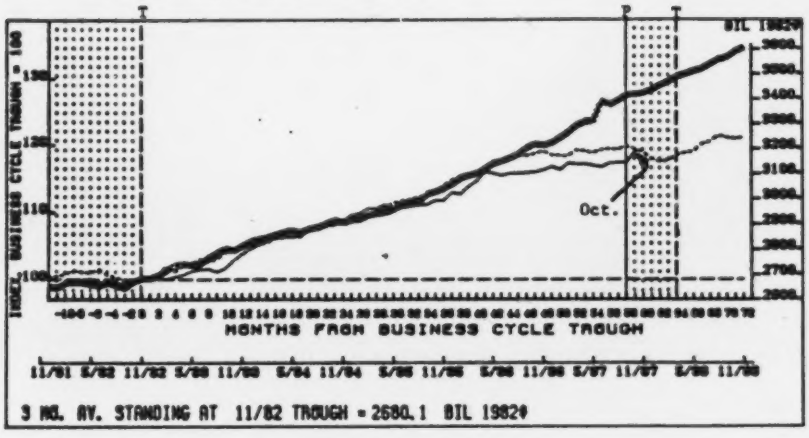
17. REAL GNP, GROWTH RATE



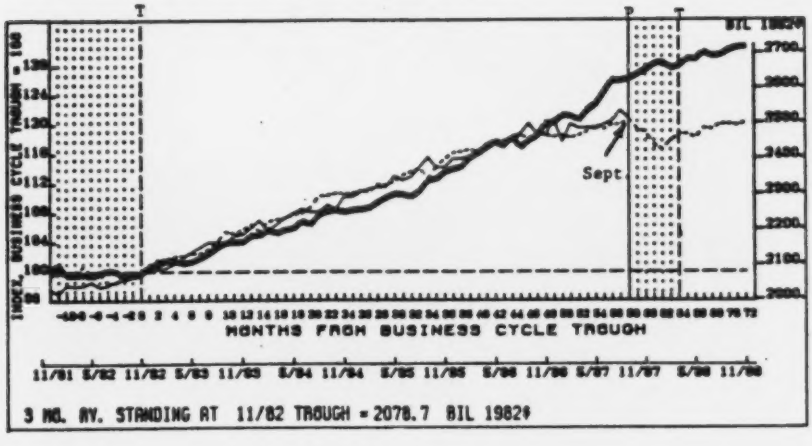
18. INDUSTRIAL PRODUCTION INDEX



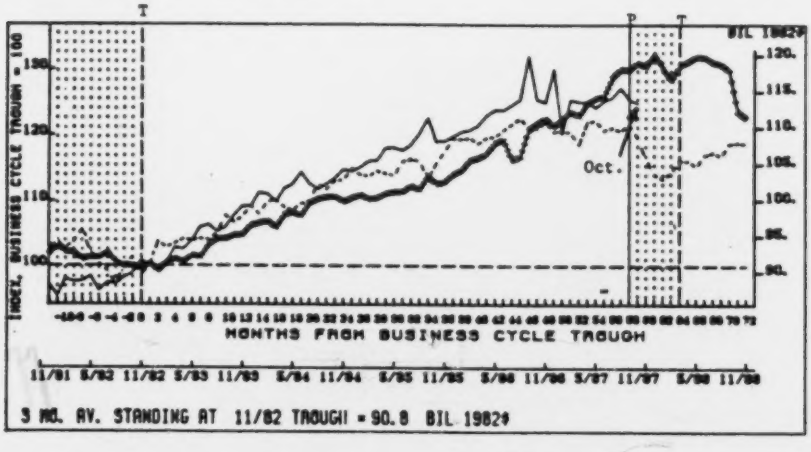
19. REAL PERSONAL INCOME



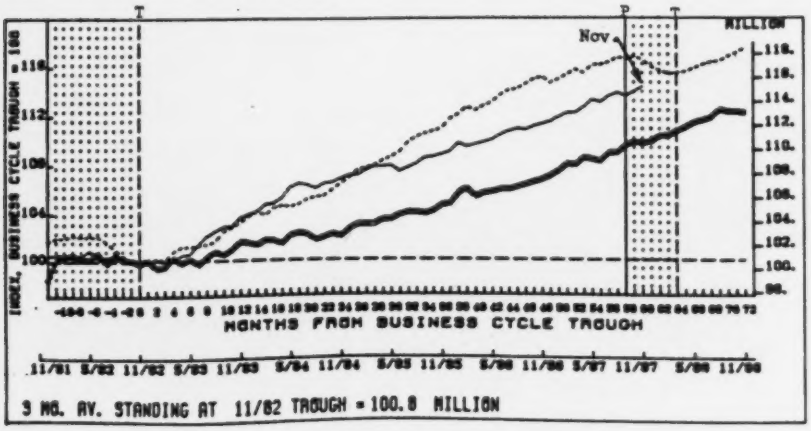
20. REAL CONSUMER EXPENDITURES



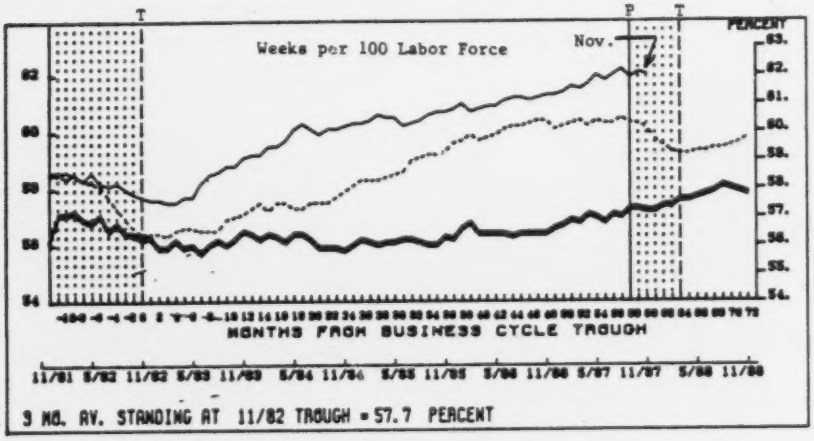
21. REAL RETAIL SALES



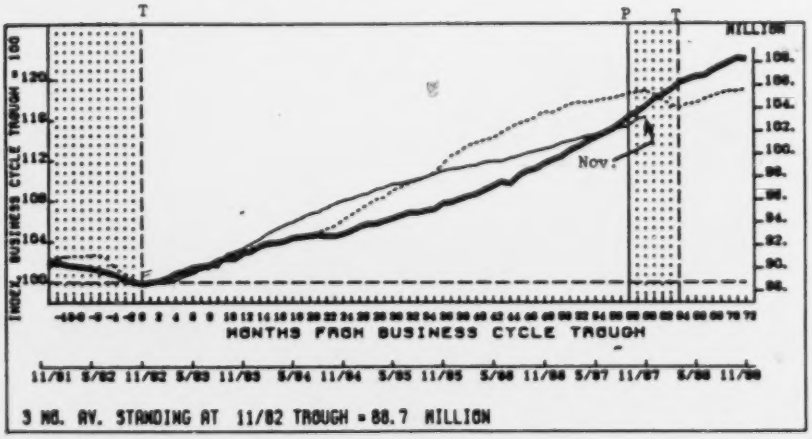
22. TOTAL EMPLOYMENT



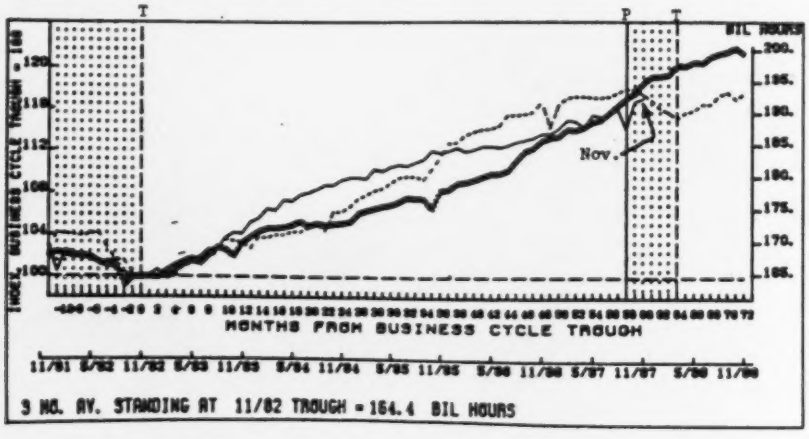
23. EMPLOYMENT TO POPULATION RATIO



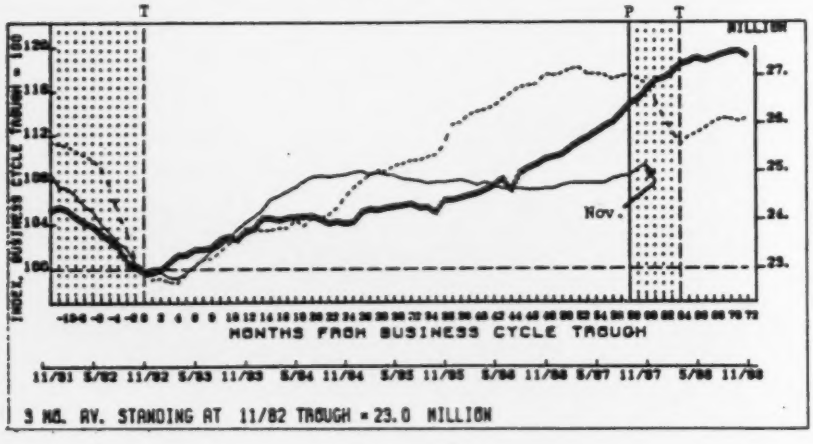
24. NONFARM EMPLOYMENT



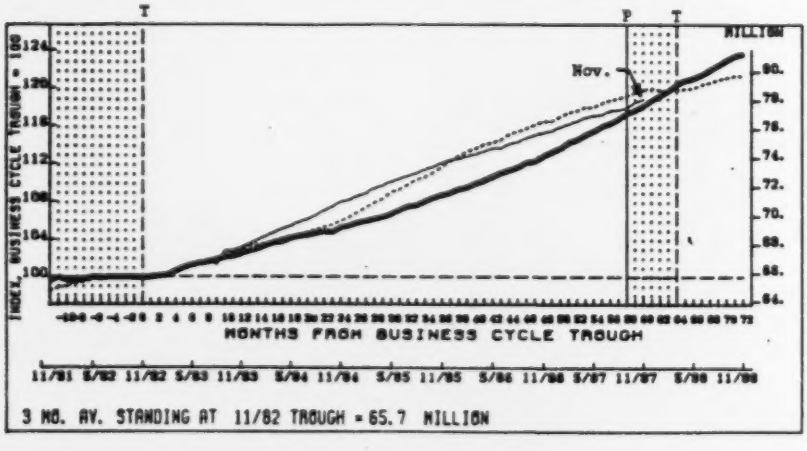
25. NONFARM EMPLOYEE HOURS



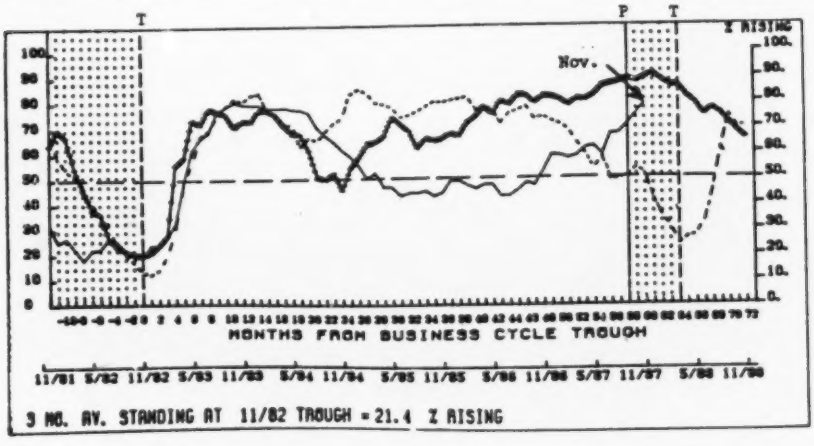
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES



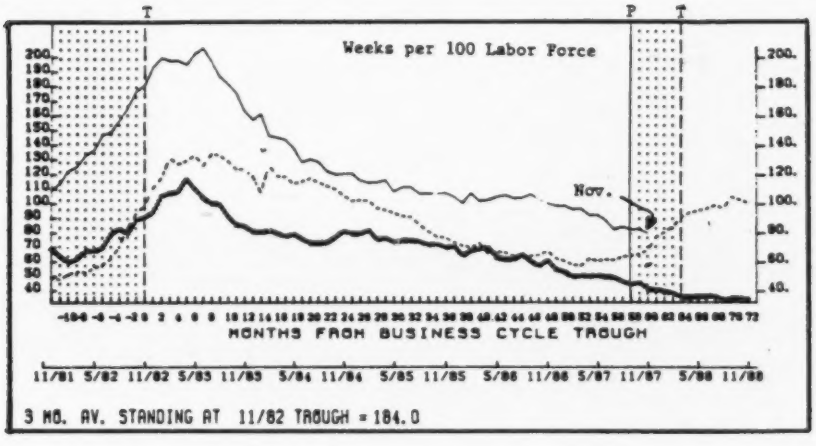
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES



28. EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES


T
P
T
% RISING
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 21.4 % RISING

29. UNEMPLOYMENT SEVERITY INDEX


T
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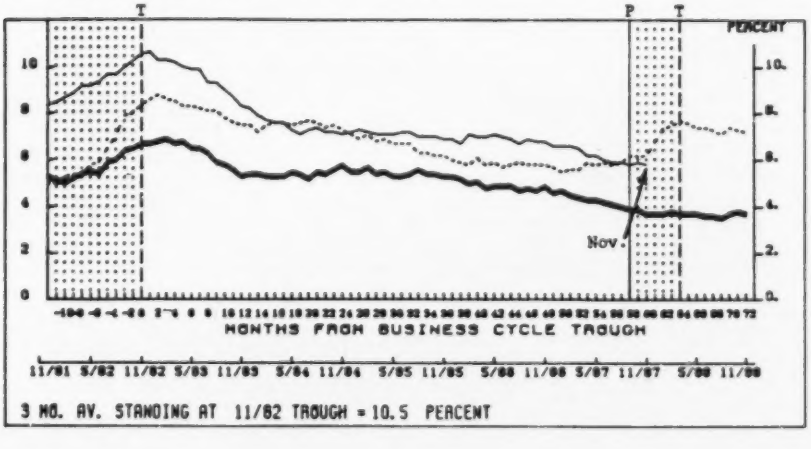
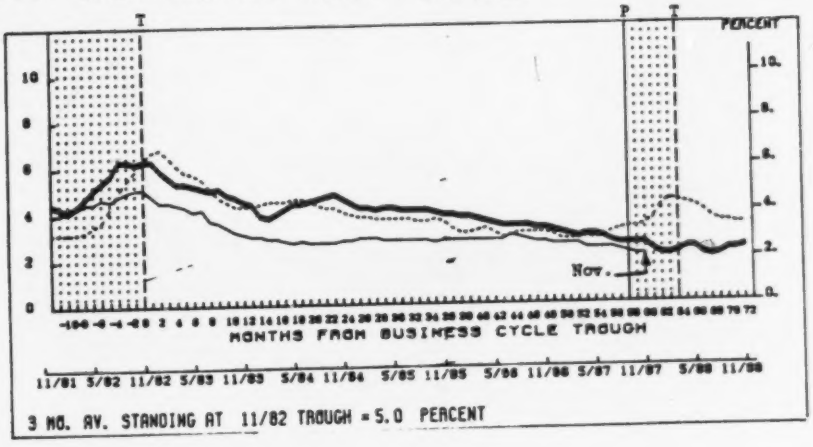
Weeks per 100 Labor Force
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 184.0

30. UNEMPLOYMENT RATE: TOTAL


T
P
T
PERCENT
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 10.5 PERCENT

31. UNEMPLOYMENT RATE: INSURED


T
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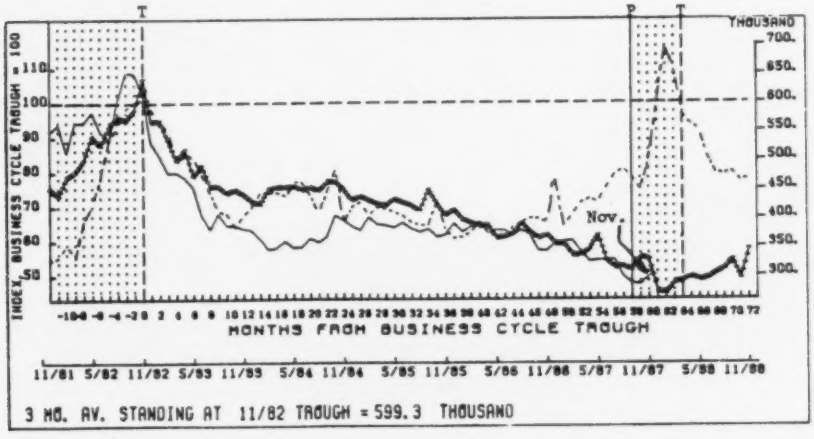
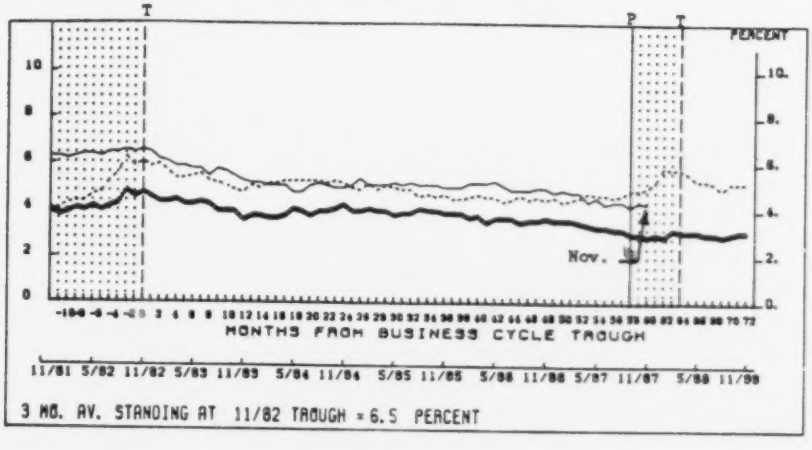
T
PERCENT
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 5.0 PERCENT

32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE

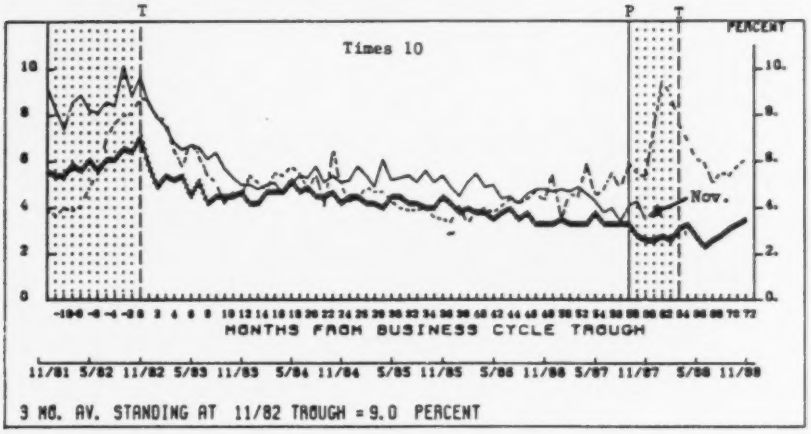

T
P
T
THOUSAND
INDEX, BUSINESS CYCLE TROUGH = 100
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 599.3 THOUSAND

33. SHORT-DURATION UNEMPLOYMENT RATE


T
P
T
PERCENT
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 6.5 PERCENT

OTHER LEADING EMPLOYMENT INDICATORS

34. LAYOFF RATE UNDER 5 WEEKS


T
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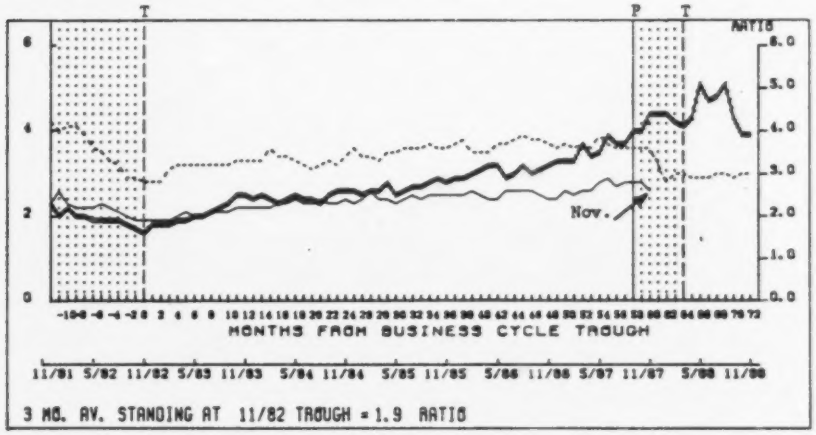
T
PERCENT
Times 10
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.0 PERCENT

35. VOLUNTARY TO INVOLUNTARY PART-TIME EMPLOYMENT RATIO


T
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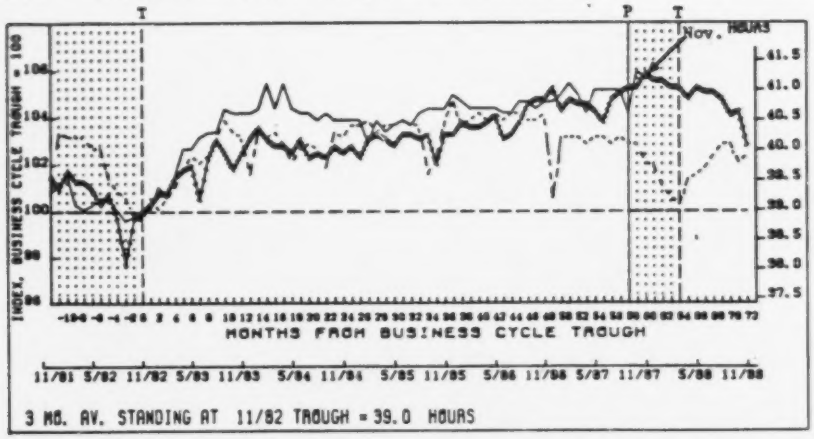
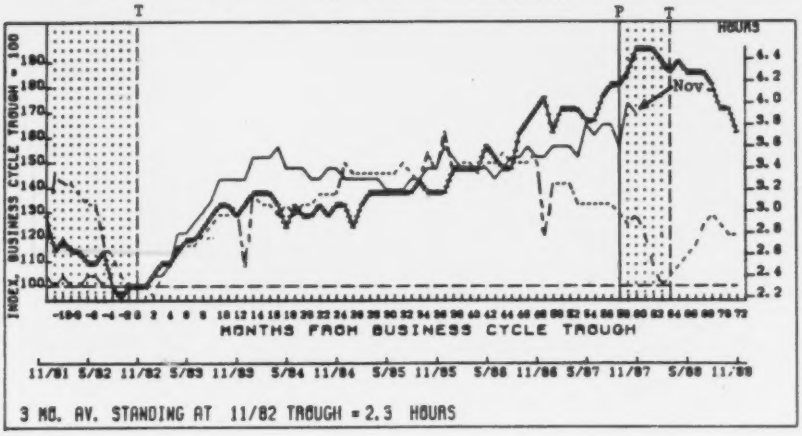
RATIO
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1.9 RATIO

36. AVERAGE WORKWEEK, MANUFACTURING

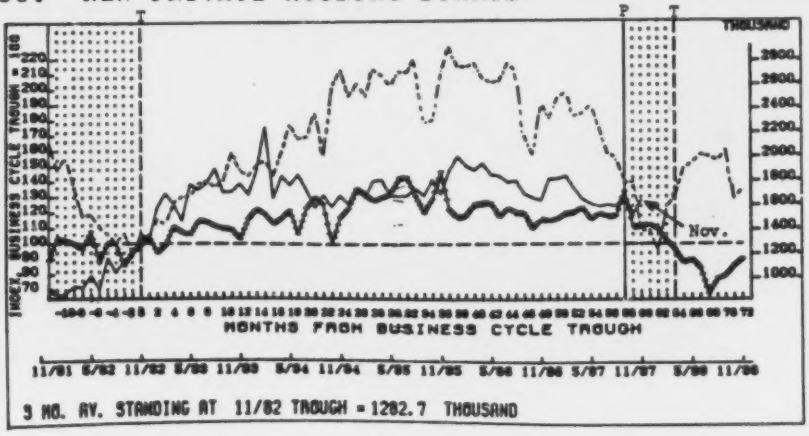

T
P
T
Nov.
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 39.0 HOURS

OTHER LEADING EMPLOYMENT INDICATORS, continued

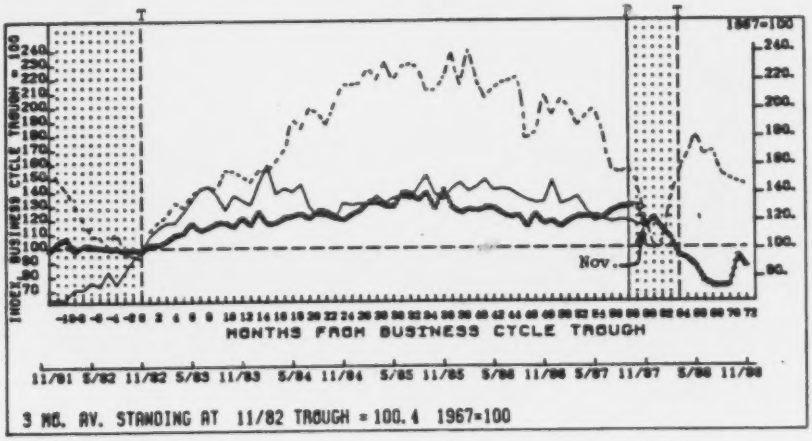
37. OVERTIME HOURS, MANUFACTURING


T
P
T
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
Nov
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2.3 HOURS

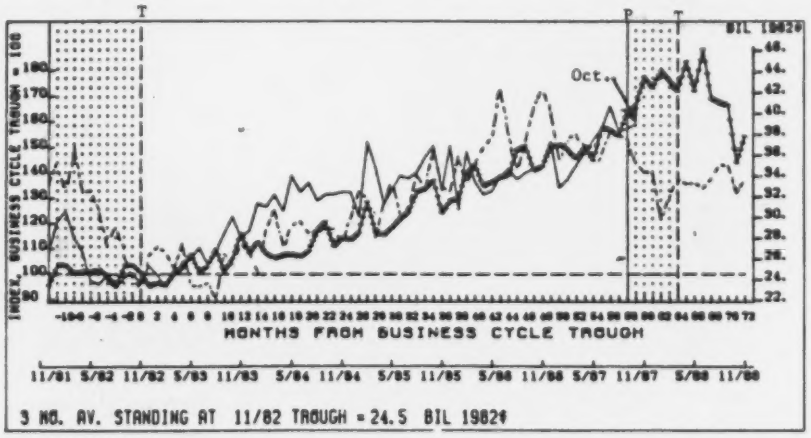
38. NEW PRIVATE HOUSING STARTS


T
P
T
THOUSAND
INDEX, BUSINESS CYCLE TROUGH = 100
Nov.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1282.7 THOUSAND

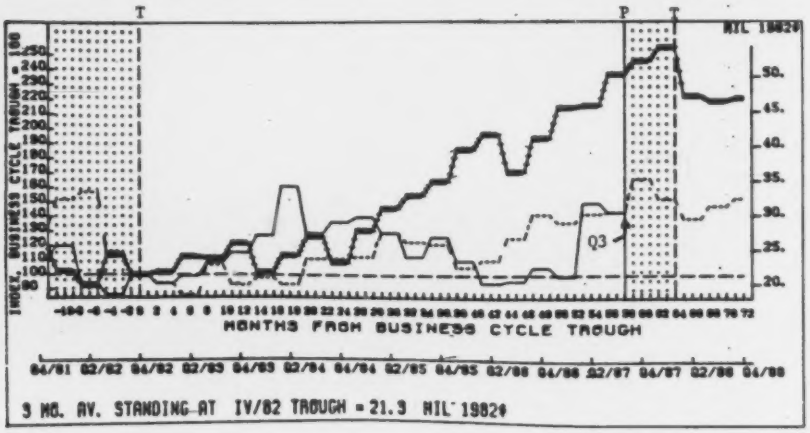
39. NEW PRIVATE HOUSING PERMITS



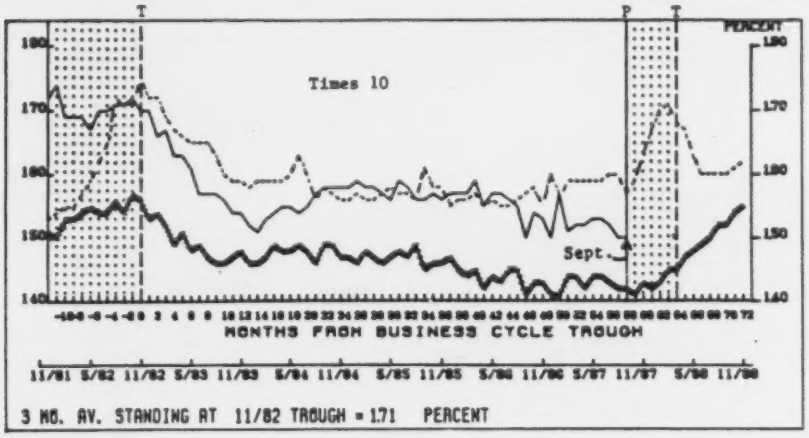
40. CONTRACTS & ORDERS, PLANT & EQUIPMENT


T
P
T
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
Oct.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 24.5 BIL 1982$

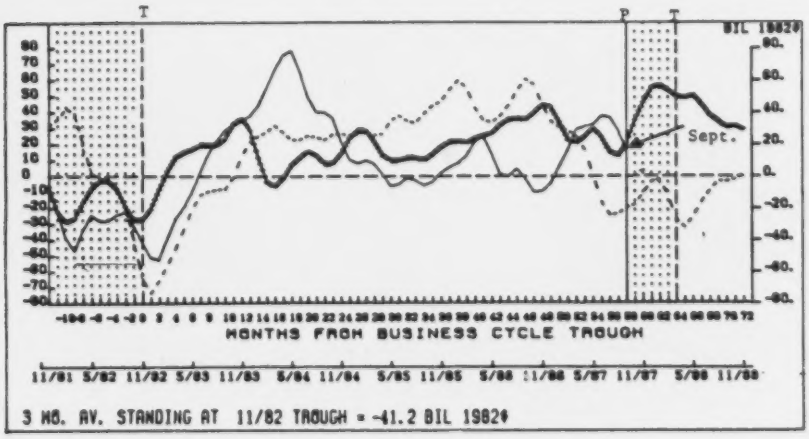
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING



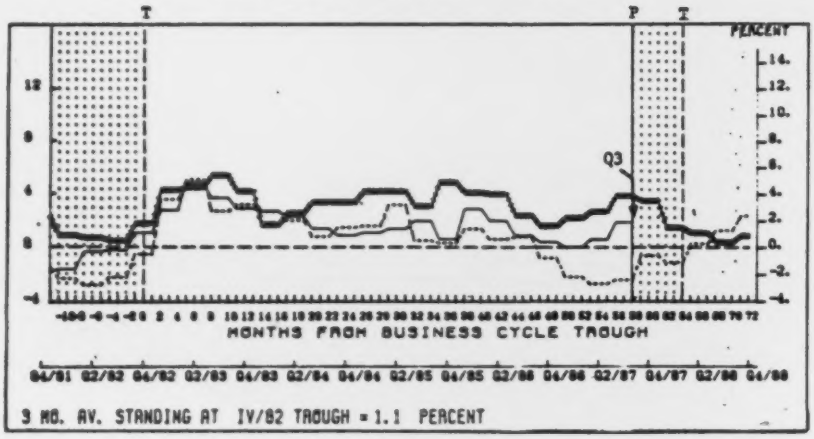
42. INVENTORY/SALES RATIO, MANUFACTURING AND TRADE



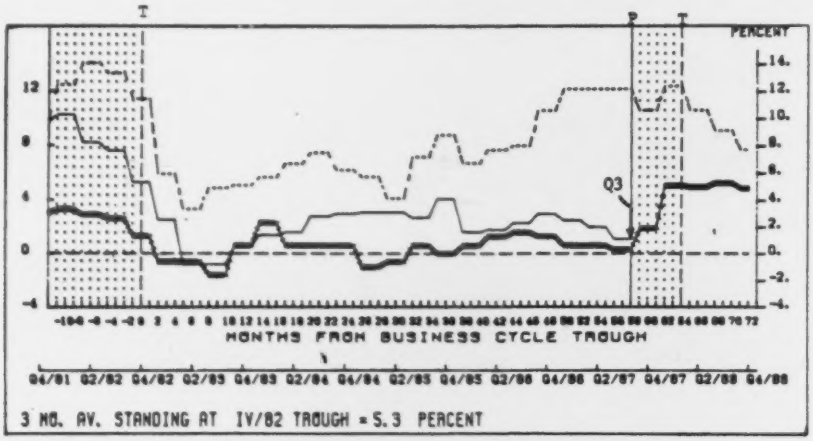
43. CHANGE IN INVENTORY ON HAND & ON ORDER



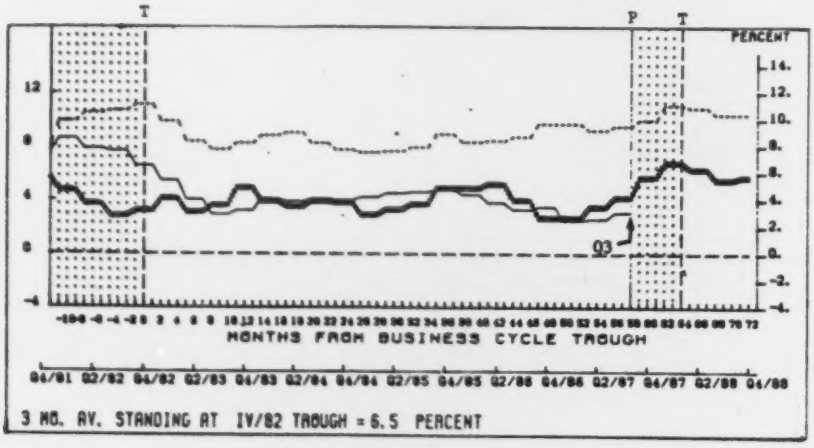
44. OUTPUT PER HOUR, GROWTH RATE



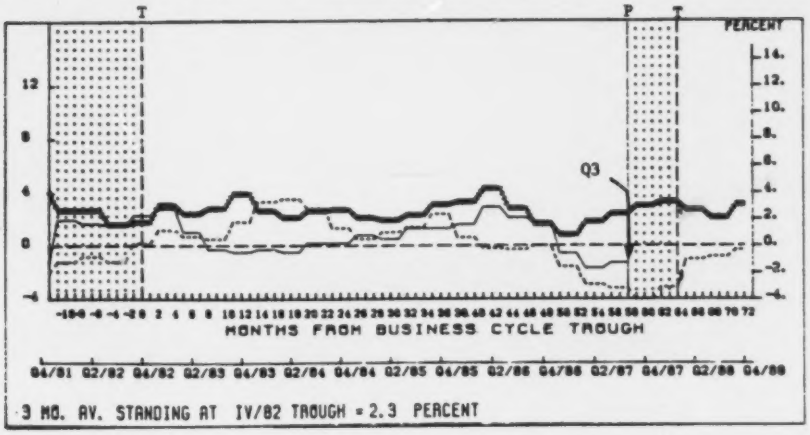
45. UNIT LABOR COSTS, GROWTH RATE



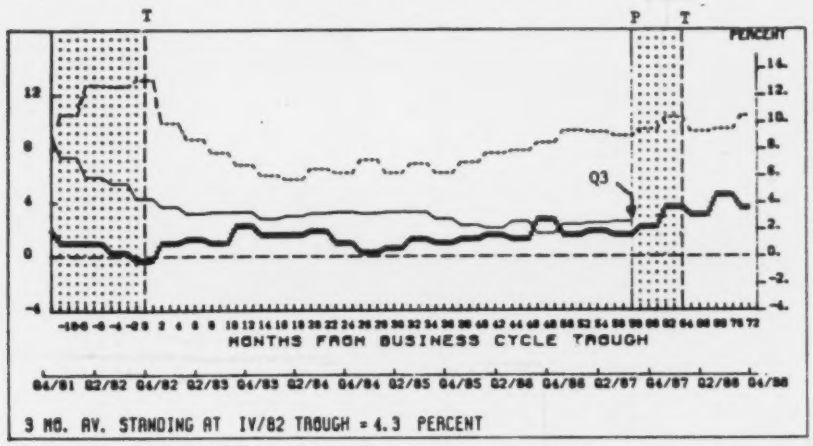
46. HOURLY COMPENSATION, GROWTH RATE



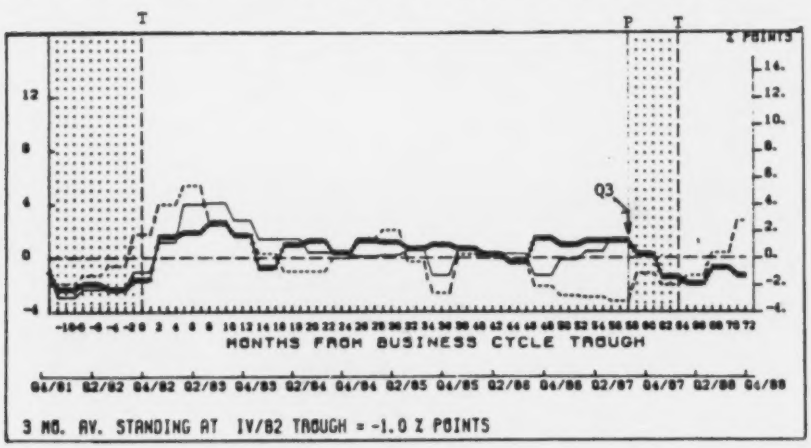
47. REAL HOURLY COMPENSATION, GROWTH RATE



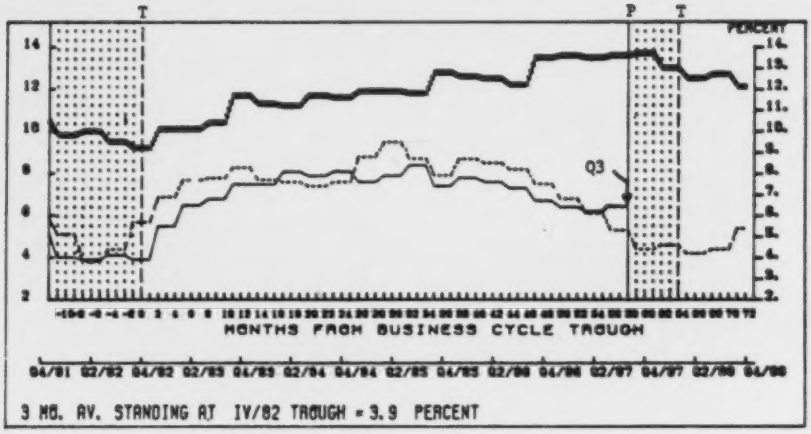
48. SELLING PRICE INDEX, GROWTH RATE



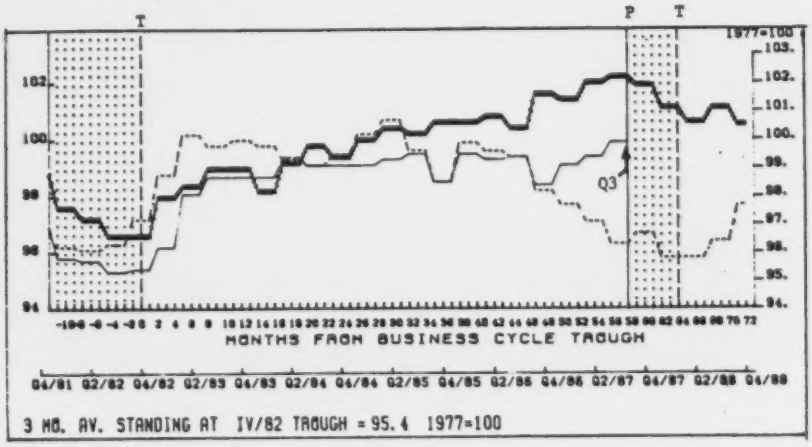
49. GROWTH RATE IN PRICES MINUS GROWTH RATE IN COSTS



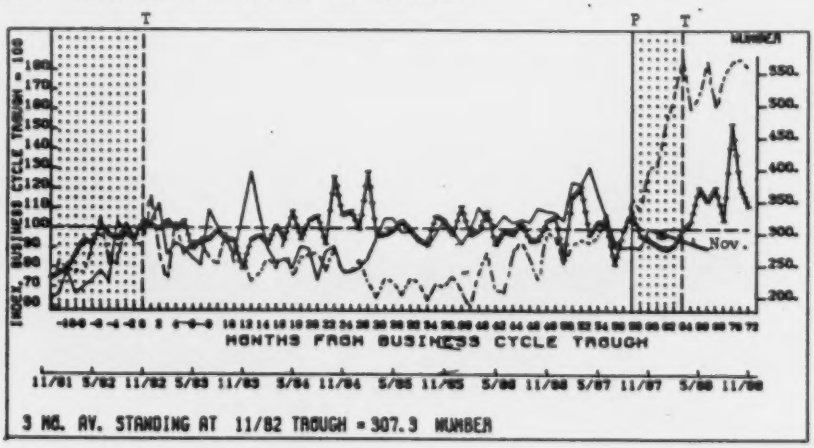
50. CORPORATE PROFIT MARGIN



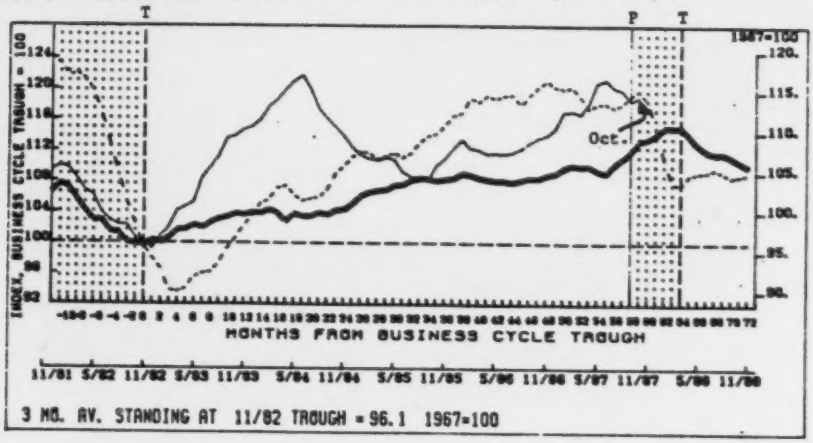
51. PRICE/LABOR COST RATIO



52. LARGE BUSINESS FAILURES



53. LEADING INDEX OF INFLATION (CIBCR)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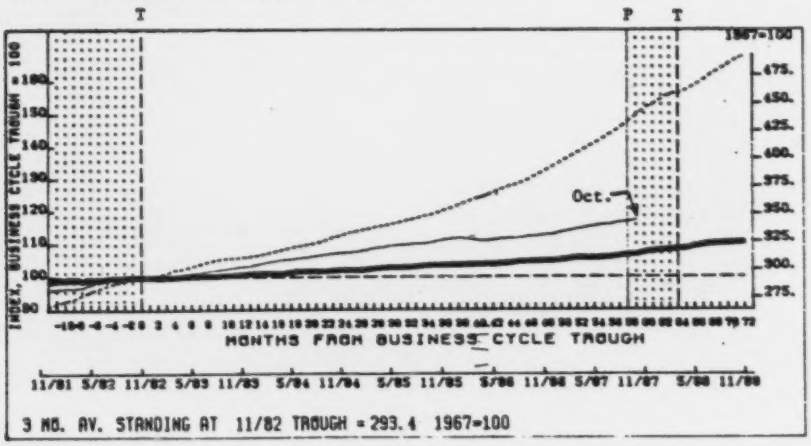
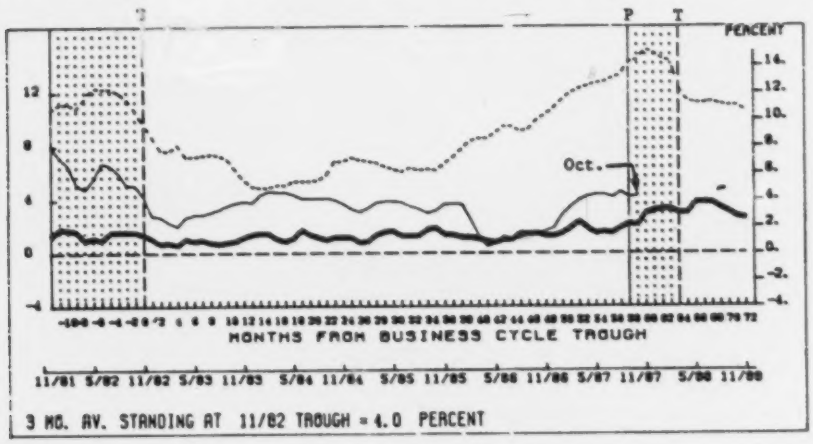
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Oct.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 96.1 1967=100

54. CONSUMER PRICE INDEX



55. CONSUMER PRICE INDEX, GROWTH RATE


T
P
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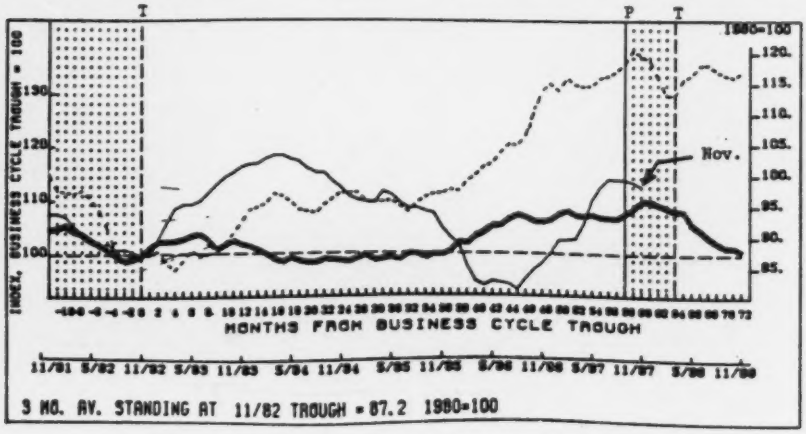
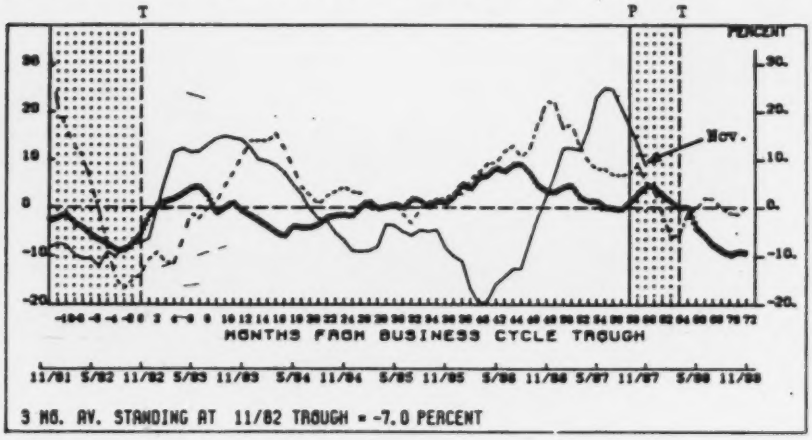
PERCENT
Oct.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.0 PERCENT

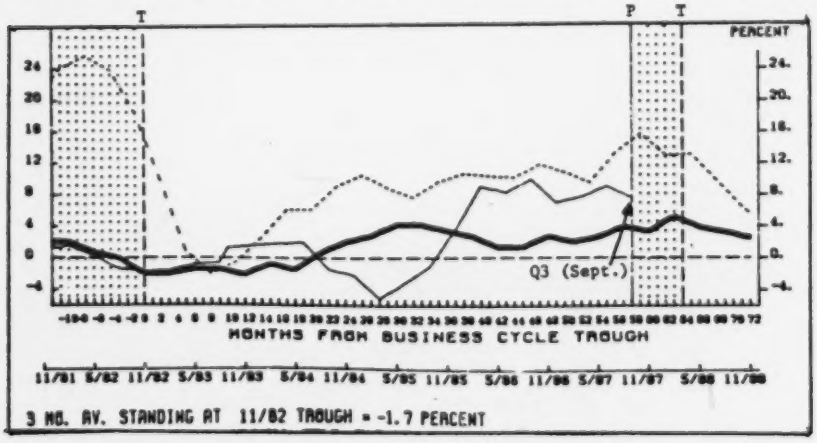
56. INDUSTRIAL MATERIALS PRICE INDEX



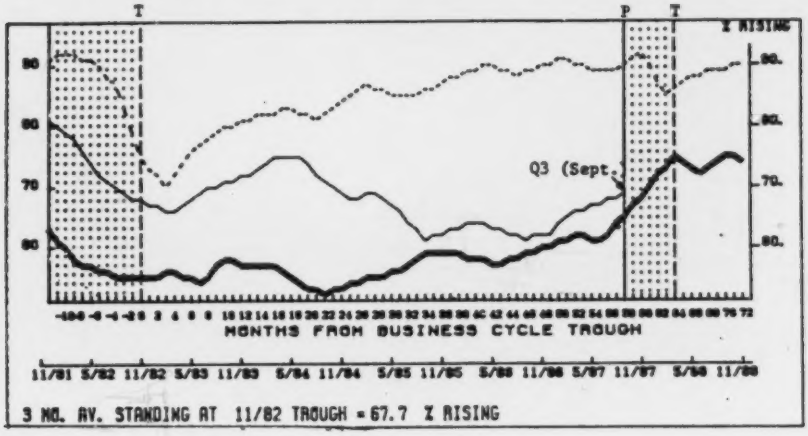
57. INDUSTRIAL MATERIALS PRICE INDEX, GROWTH RATE



58. IMPORT PRICE INDEX (EXCLUDING FUELS), GROWTH RATE



59. BUSINESSMEN'S ANTICIPATED SELLING PRICES (SURVEY)


T
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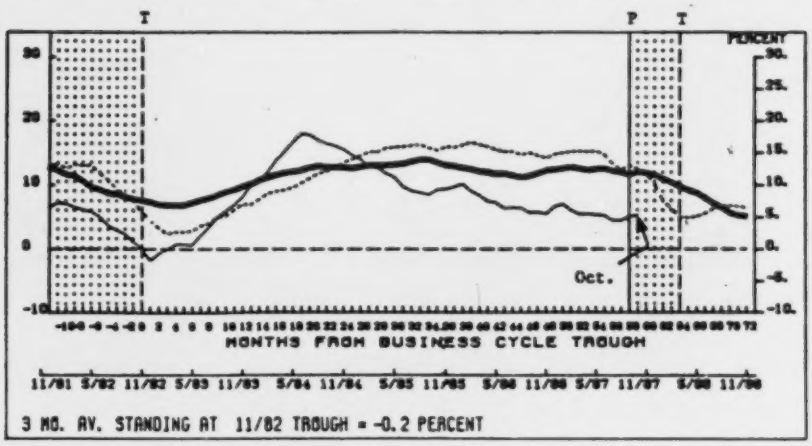
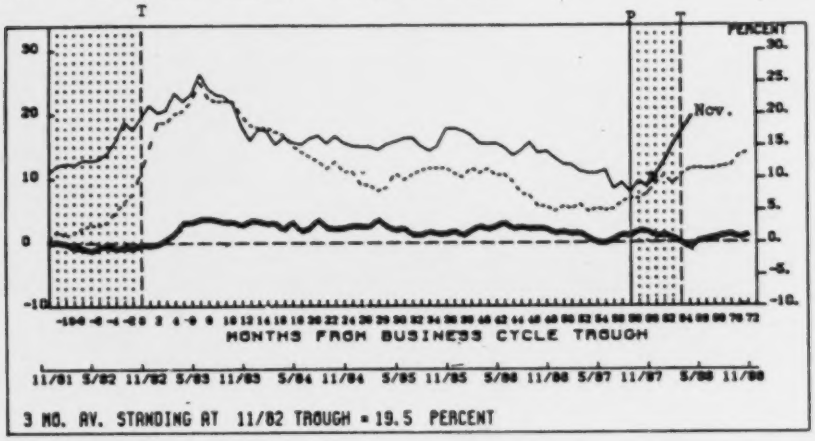
% RISING
Q3 (Sept.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 67.7 % RISING

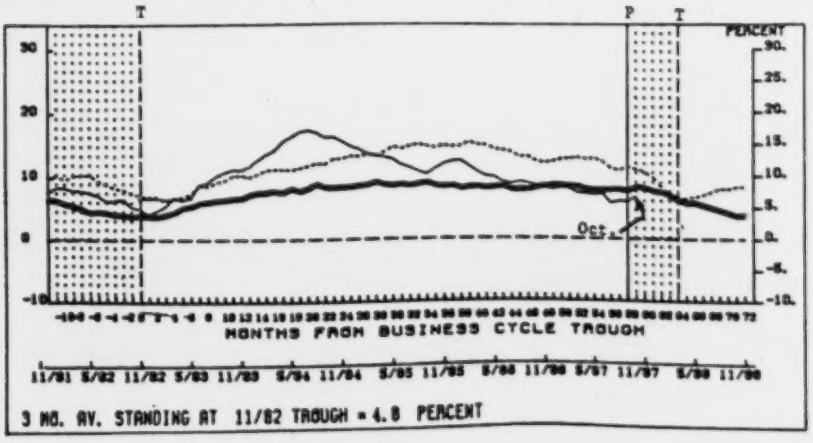
60. BUSINESS & CONSUMER DEBT, GROWTH RATE



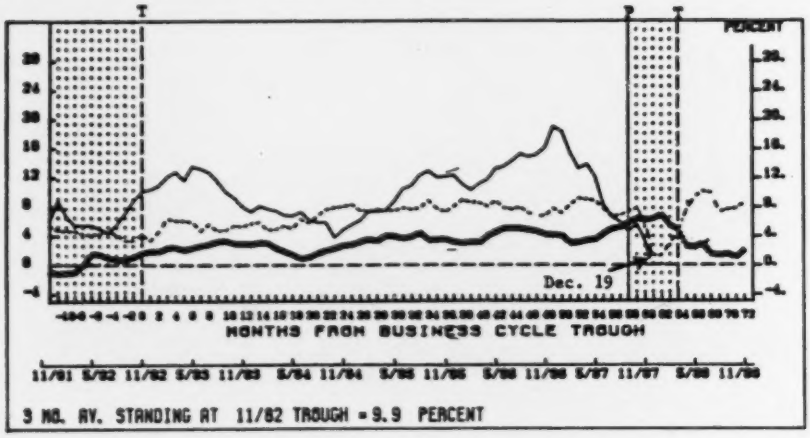
61. FEDERAL DEBT, GROWTH RATE



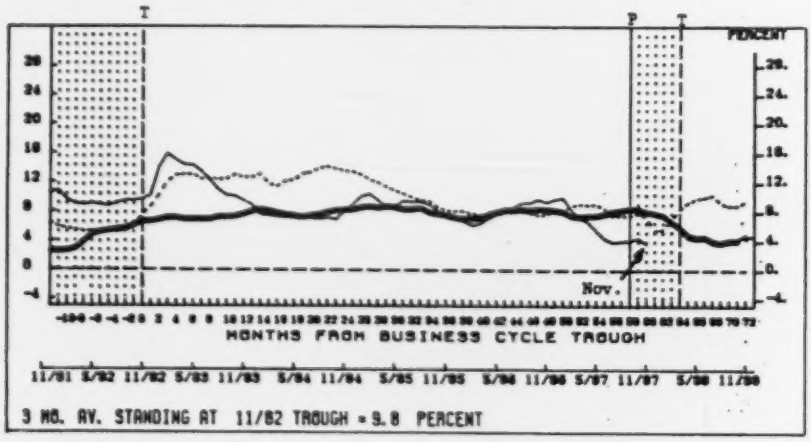
62. TOTAL DEBT, GROWTH RATE



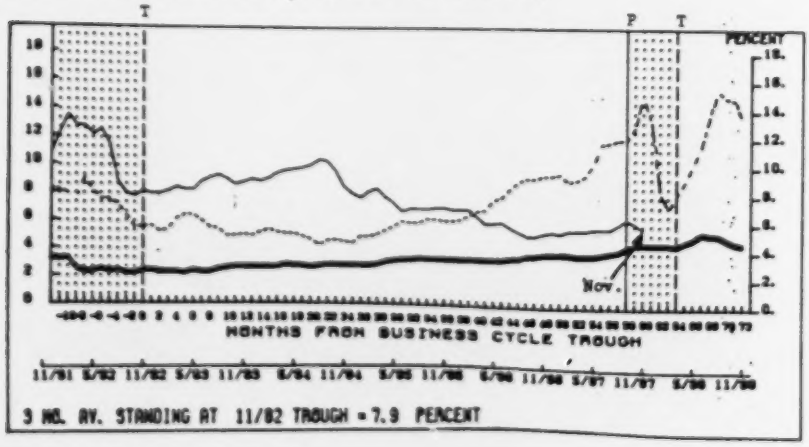
63. MONEY SUPPLY (M1), GROWTH RATE



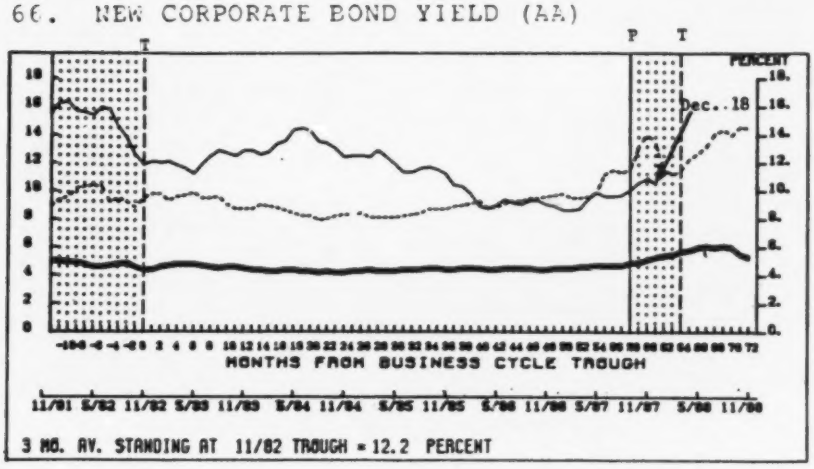
64. MONEY SUPPLY (M2), GROWTH RATE



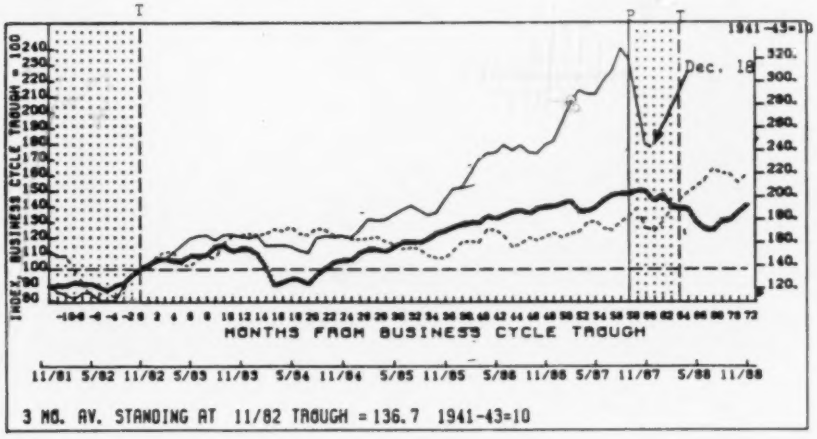
65. TREASURY BILL RATE (3-MONTH)



66. NEW CORPORATE BOND YIELD (AA)


T
P
T
PERCENT
Dec..18
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 12.2 PERCENT

67. COMMON STOCK PRICE INDEX (S&P 500)



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The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

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Uris Hall, Columbia University
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ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 198[illegible] Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

**A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions**

Published by the Center for International Business Cycle Research,
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 10, No. 1
February 1988

Summary

Newly designed weekly signals of slowdown or recession show that the first of three signals was triggered shortly before October's stock market crash but that the second and third signals have not yet appeared. Hence the economy is teetering between slowdown and recession. This implies a favorable outlook for inflation, since inflation seldom accelerates during slowdowns or recessions.

Weekly Indexes Yield New Signals of Recession

In the December issue of Recession-Recovery Watch we noted that the first of three sequential signals of recession had been triggered by the November growth rate in the Commerce Department's (BCD) leading index. The signals were designed by the Center in 1980-82 and the first signal (P1) occurs when the leading index growth rate (LGR) declines below 2.3%. Prior to November the rates had been in the 5 to 7% range but the November rate fell to 2.0% (revised). The second signal (P2) is tripped when LGR gets below -1.0% and the coincident index rate (CGR) goes below 2.3%. The third and final signal (P3) is when LGR remains less than zero and CGR falls below -1.0%. In the latest figures (for January) LGR was 0.3% and CGR was 3.8%, so the second signal had not been reached.

In an effort to put the signal system on a more up-to-date basis we have applied the same set of signal definitions to growth rates in two weekly indexes, namely, the Business Week leading index and production index. The leading index was designed by the Center, using methods similar to those used in the BCD leading index, and is based on seven leading indicators available weekly. The seven components are stock prices (S&P 500), corporate bond yields (inverted), growth rates in real estate loans, in the broad money supply (M2) and in industrial materials prices, the number of large business failures (inverted) and initial claims for unemployment insurance (inverted). The production index is

compiled by Business Week from weekly data on output of steel, autos, trucks, machinery, defense and space equipment, lumber, paper, paperboard, oil refining, electric power, coal, and rail freight traffic. It is closely related to the Federal Reserve's index of industrial production, one of the four components of the BCD coincident index, and we use it as a proxy for the latter.

We find that since 1949 the peak signals generated by the weekly indexes have occurred at roughly the same time as those obtained from the BCD indexes, although the first signal, more often than not, has occurred earlier in the weekly data. This happened again in 1987, when the weekly leading index first registered a growth rate below 2.3% in the week ending September 26, shortly before the stock market crash, whereas the BCD leading index signal came in November. These growth rates are based on four-week moving averages of the weekly indexes, placed in the fourth week, taken as a ratio to the average index over the preceding 52 weeks and expressed as a compound annual rate. After September 26 the weekly leading index rate continued to decline, going below the second signal level (-1.0%) in the week of October 31 and remaining negative thereafter. The latest figure as of this writing is -8.3% for February 20, 1988.

Despite the weakness in the leading index, the production index has remained buoyant so far, with growth rates in the 6 to 8% range. As of February 20 the rate was 8.0%. Hence the second of the three sequential signals has not been tripped. Judging from the historical record of the first weekly signal the outlook is for either an economic slowdown or a recession. Since 1949 the P1 signal has indicated recession six times and slowdowns three times, with an average lead of 8 months before recessions began and 3 months before slowdowns began. Table A gives the record of the P1 signals and the subsequent growth rates in the two weekly indexes and in real GNP. Chart A shows the corresponding average patterns. The broad similarity between the average patterns for the weekly production index and real GNP is notable, and both clearly lag behind the leading index patterns. The distinction between recession and slowdown does not become clear in most instances until about 9 months after the P1 signal has passed, which in this case would mean June 1988. By that time the P2 signal is likely to have appeared, if indeed a recession lies ahead.

The signals of slowdown or recession also have a bearing on inflation. Declines in the rate of inflation have been associated with slowdowns and recessions and have rarely if ever occurred at other times. Since inflation cycles tend to lag behind business cycles, the second and third recession signals are crucial from this point of view.

TABLE A.
SLOWDOWN AND RECESSION PATTERNS FOLLOWING INITIAL (P1) SIGNALS BASED ON BUSINESS WEEK LEADING INDEX

P1 Signals Followed by Recessions	Business Cycle Peak	Lead(-) or Lag(+) at Peak (months)	BW Leading Index Growth Rate P1	P1 +3	P1 +6 (percent)	P1 +9	P1 +12
4/53	7/53	-3	-1.2	-1.2	-3.3	2.5	6.6
10/55	8/57	-22	0.7	-0.5	-0.3	-0.6	-1.3
9/59	4/60	-7	1.9	-3.4	-5.9	-4.7	0.4
4/69	12/69	-8	1.4	-4.3	-6.5	-7.3	-8.4
4/73	11/73	-7	1.7	1.0	-2.5	-3.7	-3.9
10/79	1/80	-3	-0.7	-1.4	-10.6	-10.0	-1.6
...	7/81	...	...	...	...	...	...
Average, 6 recessions		-8	1.1	-1.6	-4.8	-4.0	-1.4

P1 Signals Followed by Slowdowns	Growth Cycle Peak	Lead(-) or Lag(+) at Peak (months)	BW Leading Index Growth Rate P1	P1 +3	P1 +6 (percent)	P1 +9	P1 +12
4/51	3/51	+1	-0.5	-13.8	-8.5	-3.8	0.4
4/66	6/66	-2	1.6	-6.0	-10.8	-3.3	2.0
5/84	12/84*	-7*	1.1	0.7	3.3	9.4	9.6
Average, 3 slowdowns		-3	0.7	-6.4	-5.3	0.8	4.0
Latest P1 Signal							
9/26/87	...	...	2.2	-8.9	-8.3a	...	...

TABLE A, continued

P1 Signals Followed by Recessions	BW Production Index Growth Rate, at P1	P1 +3	P1 +6	P1 +9	P1 +12	Real GNP Growth Rates, at P1	P1 +3	P1 +6	P1 +9	P1 +12
			(percent)					(percent)		
4/53	15.5	12.6	1.0	-9.4	-11.2	5.7	2.6	-0.4	-3.2	-3.1
10/55	12.7	4.3	1.4	-6.3	2.7	4.8	2.2	1.7	0.9	2.2
9/59	0.4	8.2	3.3	-2.6	1.1	3.5	2.8	4.2	2.1	1.5
4/69	5.4	4.3	3.3	-3.3	-2.8	2.1	2.1	0.7	-1.0	-1.0
4/73	9.1	6.9	5.4	-0.4	0.1	5.2	2.8	2.5	0.2	0.5
10/79	1.3	-2.7	-5.6	-12.0	-6.9	2.1	2.1	-2.4	-2.0	0.6
	...	...	...	...	...	...	...	...	...	...
Average, 6 recessions	7.4	5.6	1.5	-5.7	-2.8	3.7	2.4	1.0	-0.5	0.1
P1 Signals Followed by Slowdowns										
4/51	11.3	4.1	-1.4	1.0	3.2	10.8	9.8	6.4	5.0	2.0
4/66	13.2	10.6	9.3	2.5	-0.4	5.3	4.5	3.0	2.4	2.5
5/84	9.5	9.8	2.0	4.5	0.8	7.4	5.5	3.6	3.1	2.6
Average, 3 slowdowns	11.3	8.2	3.3	2.7	1.2	7.8	6.6	4.3	3.5	2.4
Latest P1 Signal										
9/25/67	6.2	6.3	7.5b	...	...	3.5	4.0c	...	...	...

Note: The P1 Signal occurs when the leading index growth rate first declines below 2.3%. It is canceled if the rate subsequently goes above 4.3%. P1 signal dates and subsequent cancellation dates were: 8/65-10/65, 4/66-5/67, 3/68-3/68, 2/78-6/78, 5/84-12/84.

* Growth cycle peaks are based on measures of aggregate economic activity expressed as deviations from long-term trend. No growth cycle peak was identified in 1984-85, but the trend-adjusted BCD coincident index reached a peak in 12/84 and is used here. An additional growth cycle peak occurred in 5/62, but no P1 signal occurred then.

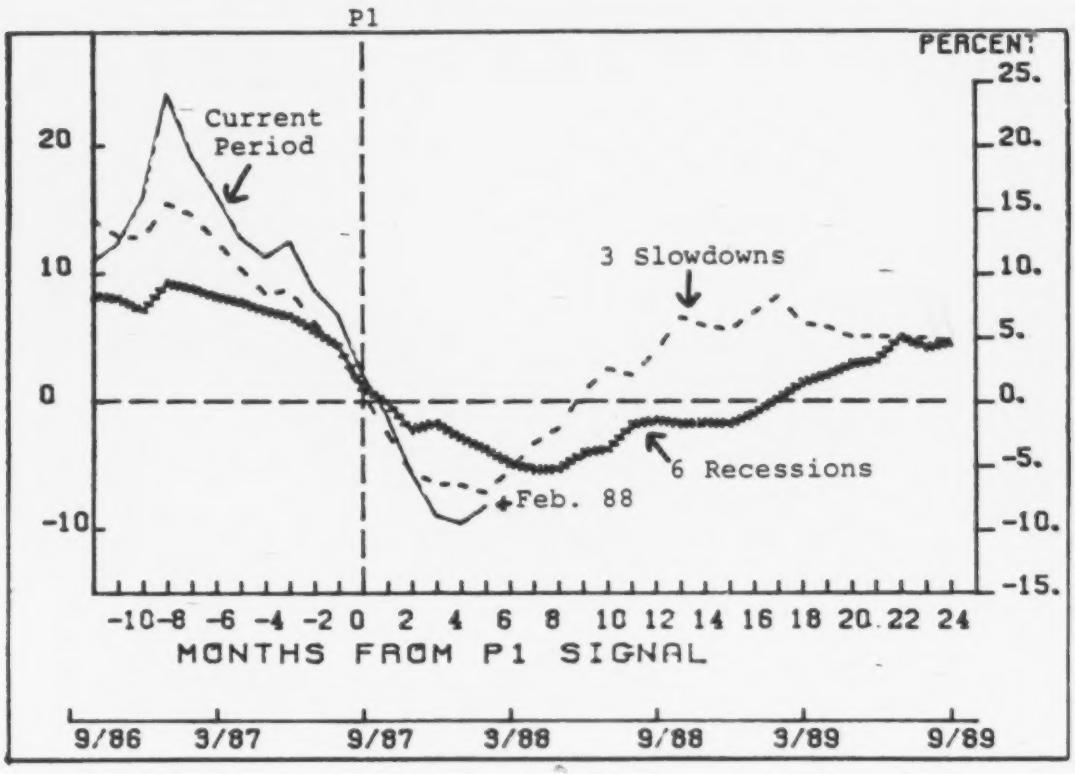
a Feb. 20, 1988 b Feb. 13, 1988 c Q4, 1987

Reference: Victor Zarnowitz and Geoffrey H. Moore, Sequential Signals of Recession and Recovery, in Chapter IV, Business Cycles, Inflation and Forecasting, by Moore, Ballinger Publishing Co., 1983.

CHART A.

AVERAGE SLOWDOWN AND RECESSION PATTERNS AFTER WEEKLY P1 SIGNAL DATES

1. Business Week Leading Index Growth Rate



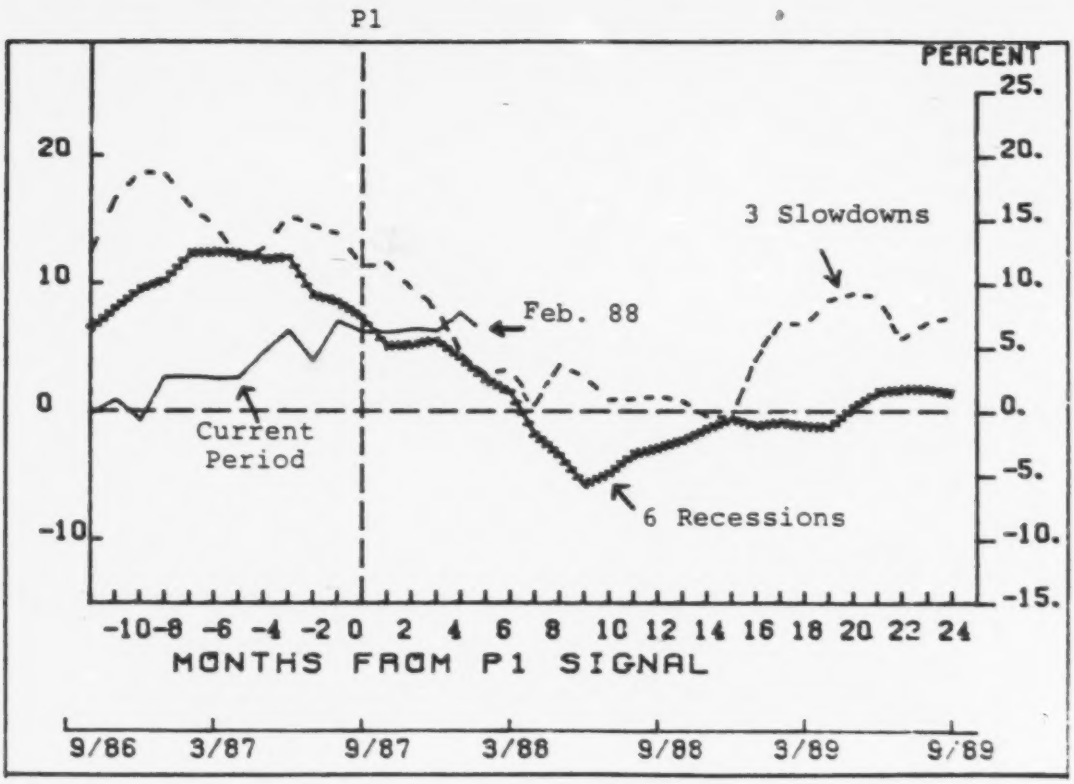
Note: The P1 signal is the first of three signals defined by growth rates in the Business Week leading index (LDGR) and production index (PGR), as follows:

P1:	LDGR < 2.3%;	PGR > 0
P2:	LDGR < -1.0%;	PGR < 2.3%
P3:	LDGR < 0	PGR < -1.0%

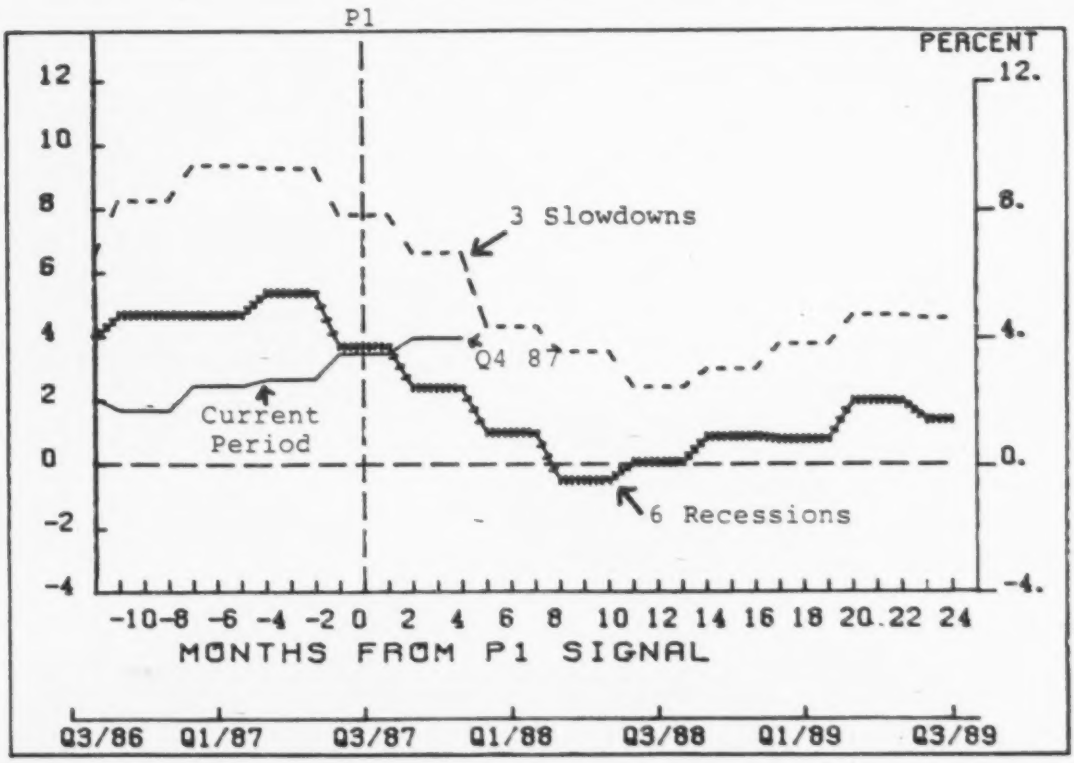
The latest P1 signal was reached in the week ending Sept. 26, 1987, when LDGR fell to 2.1%

CHART A., continued

2. Business Week Production Index Growth Rate



3. Real GNP Growth Rate



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3	Coincident Employment Index (CIBCR)	15
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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover more than sixty indicators and give the information needed to compare the current expansion with two very long expansion since 1961. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business percentages of business cycle trough standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 62 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Actual Levels

		UNIT	Months After Business cycle Trough	Expansions Starting Feb. 1961	Expansions Starting Mar. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	62	1.6	-12.0	-9.5	JAN
6A.	LONG LEADING INDEX, GROWTH RATE	%	61	-0.1	-20.2	0.6	DEC
6B.	N.A.P.M. INDEX, GROWTH RATE	%	62	9.7	-11.0	9.1	JAN
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	62	9.6	-10.5	3.7	JAN
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	62	10.8	-7.4	6.1	JAN
9.	LEADING INDEX, GROWTH RATE.	%	61	9.6	-12.1	1.0	DEC
10.	COINCIDENT INDEX, GROWTH RATE	%	61	10.6	-6.0	4.6	DEC
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	62	79.0	28.0	63.0	JAN
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	61	101.9	109.7	120.0	DEC
15.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	60	4.9	4.2	9.6	NOV
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	200	8.0	2.1	4.0	Q4
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	62	57.4	59.5	62.4	JAN
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	62	88.3	35.1	73.2	JAN
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		62	40.0	80.7	82.1	JAN
30.	UNEMPLOYMENT RATE: TOTAL	%	62	3.7	7.4	5.7	JAN
31.	UNEMPLOYMENT RATE: INSURED	%	62	2.1	4.2	2.3	JAN
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	62	2.9	5.9	4.4	JAN
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	62	2.8	9.6	4.1	JAN
35.	PART-TIME EMPLOYMENT RATIO	%	62	4.4	2.8	2.7	JAN
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	60	14.3	16.3	15.4	NOV
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	60	46.2	-10.6	37.5	NOV
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	200	3.5	-0.6	1.5	Q4
45.	UNIT LABOR COSTS, GROWTH RATE	%	200	1.9	10.6	1.7	Q4
46.	HOURLY COMPENSATION, GROWTH RATE	%	200	5.7	10.0	3.1	Q4
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	200	3.0	-4.0	-1.0	Q4
48.	SELLING PRICE INDEX, GROWTH RATE	%	200	2.2	9.5	2.3	Q4
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	200	0.3	-1.1	0.6	Q4
50.	CORPORATE PROFIT MARGIN	%	190	13.6	5.3	6.5	Q3
51.	PRICE/LABOR COST RATIO	1977=100	200	101.9	96.7	99.6	Q4
53.	CONSUMER PRICE INDEX, GROWTH RATE	%	61	3.2	14.9	3.7	DEC
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	62	2.6	-1.4	3.3	JAN
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	61	3.9	13.8	9.7	Q4(DEC)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	61	70.0	90.0	70.0	Q4(DEC)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	61	11.6	10.0	7.0	DEC
61.	FEDERAL DEBT, GROWTH RATE	%	62	1.2	10.4	6.8	JAN
62.	TOTAL DEBT, GROWTH RATE	%	61	7.7	9.8	7.0	DEC
63.	MONEY SUPPLY (M1), GROWTH RATE	%	62	7.0	1.2	3.4	JAN
64.	MONEY SUPPLY (M2), GROWTH RATE	%	62	7.6	5.7	4.3	JAN
65.	TREASURY BILL RATE (3-MONTH)	%	62	4.6	8.6	5.8	JAN
66.	NEW CORPORATE BOND YIELD (AA)	%	62	5.4	11.6	9.8	JAN

TABLE 2

RECESSION-RECOVERY STATUS UP TO 62 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Percentage Change from Trough Levels

	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes					
1. BUSINESS WEEK LEADING INDEX (CIBCR)	62	31.0	21.1	40.7	JAN
1A. LONG LEADING INDEX (CIBCR)	61	52.1	7.5	55.8	DEC
1B. N.A.P.M. INDEX	62	42.7	21.4	30.9	JAN
2. LEADING EMPLOYMENT INDEX (CIBCR)	62	41.2	19.0	35.6	JAN
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)	62	40.9	35.4	42.7	JAN
4. LEADING INDEX (BCD)	61	42.2	22.6	36.6	DEC
5. COINCIDENT INDEX (BCD)	61	42.3	27.7	30.3	DEC
12. LAGGING INDEX (BCD)	61	22.6	12.5	19.5	DEC
14. EIGHT-COUNTRY LEADING INDEX (CIBCR)	60	9.3	27.5	35.8	NOV
II. Output, Income and Sales					
16. REAL GNP	200	31.0	22.4	22.7	Q4
18. INDUSTRIAL PRODUCTION INDEX	62	52.9	28.4	33.1	JAN
19. REAL PERSONAL INCOME	61	28.3	17.9	19.3	DEC
20. REAL CONSUMER EXPENDITURES	61	28.3	17.2	20.6	DEC
21. REAL RETAIL SALES	61	32.4	14.0	24.0	DEC
III. Employment and Unemployment					
22. TOTAL EMPLOYMENT	62	10.3	15.7	15.0	JAN
24. NONFARM EMPLOYMENT	62	18.5	18.0	16.9	JAN
25. NONFARM EMPLOYEE-HOURS	62	19.1	16.0	17.4	JAN
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES.	62	17.2	13.7	9.7	JAN
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	62	19.2	19.8	19.4	JAN
32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	62	-55.3	16.3	-38.9	JAN
36. AVERAGE WORKWEEK, MANUFACTURING	62	5.6	1.1	5.4	JAN
37. OVERTIME HOURS, MANUFACTURING	62	95.2	8.3	73.9	JAN
IV. Investment Commitments and Inventories					
38. NEW PRIVATE HOUSING STARTS	62	9.0	-4.2	7.4	JAN
39. NEW PRIVATE HOUSING PERMITS	62	12.9	5.0	-0.7	JAN
40. CONTRACT & ORDERS, PLANT & EQUIPMENT	61	73.1	39.7	71.4	DEC
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING	190	136.3	43.2	42.9	Q3
V. Productivity, Wages, Costs, Prices and Profits					
52. LARGE BUSINESS FAILURES	61	-8.3	32.4	-12.5	DEC
53. LEADING INDEX OF INFLATION (CIBCR)	61	14.3	15.2	19.4	DEC
54. CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	61	7.8	53.3	17.9	DEC
56. INDUSTRIAL MATERIALS PRICE INDEX	62	9.4	32.9	11.8	JAN
VI. Money, Credit, Interest Rates and Stock Prices					
67. STOCK PRICE INDEX (S&P 500)	62	47.7	30.0	83.2	JAN

TABLE 3

RECESSION-RECOVERY STATUS UP TO 62 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Differences from Trough Levels

		Unit	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	62	-4.9	-6.7	-14.0	JAN
6A.	LONG LEADING INDEX, GROWTH RATE	%	61	-4.7	-20.1	-15.8	DEC
6B.	N.A.P.M. INDEX, GROWTH RATE	%	62	9.8	6.7	12.3	JAN
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	62	11.8	-0.6	2.4	JAN
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	62	18.8	9.3	14.0	JAN
9.	LEADING INDEX, GROWTH RATE.	%	61	8.3	1.4	-3.6	DEC
10.	COINCIDENT INDEX, GROWTH RATE	%	61	17.4	9.1	11.4	DEC
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	62	42.3	10.3	16.3	JAN
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	61	14.1	13.0	10.0	DEC
15.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	60	1.3	16.1	9.7	NOV
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	200	7.4	7.1	5.1	Q4
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	62	1.1	3.0	4.7	JAN
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	62	68.0	21.0	51.8	JAN
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		62	-51.6	-20.6	-101.9	JAN
30.	UNEMPLOYMENT RATE: TOTAL	%	62	-2.9	-0.9	-4.8	JAN
31.	UNEMPLOYMENT RATE: INSURED	%	62	-4.2	-2.1	-2.7	JAN
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	62	-1.8	-0.1	-2.1	JAN
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	62	-3.6	1.0	-4.9	JAN
35.	PART-TIME EMPLOYMENT RATIO	%	62	2.7	0.0	0.8	JAN
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	60	-12.3	-9.7	-16.7	NOV
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	60	71.2	48.6	78.8	NOV
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	200	1.7	-0.1	0.4	Q4
45.	UNIT LABOR COSTS, GROWTH RATE	%	200	0.6	-0.8	-3.6	Q4
46.	HOURLY COMPENSATION, GROWTH RATE	%	200	2.5	-1.1	-3.4	Q4
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	200	1.2	-4.2	-3.3	Q4
48.	SELLING PRICE INDEX, GROWTH RATE	%	200	2.5	-3.7	-2.0	Q4
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	200	1.9	-2.9	1.6	Q4
50.	CORPORATE PROFIT MARGIN	%	190	4.4	-0.4	2.6	Q3
51.	PRICE/LABOR COST RATIO	1977=100	200	5.3	-0.5	4.2	Q4
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	61	1.8	5.2	-0.3	DEC
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	62	7.3	11.7	10.3	JAN
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	61	5.7	-1.8	11.4	Q4(DEC)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	61	15.0	14.3	2.3	Q4(DEC)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	61	4.0	4.1	7.2	DEC
61.	FEDERAL DEBT, GROWTH RATE	%	62	1.7	-0.9	-12.7	JAN
62.	TOTAL DEBT, GROWTH RATE	%	61	3.9	2.6	2.2	DEC
63.	MONEY SUPPLY (M1), GROWTH RATE	%	62	5.4	-2.5	-6.5	JAN
64.	MONEY SUPPLY (M2), GROWTH RATE	%	62	1.1	-1.8	-5.5	JAN
65.	TREASURY BILL RATE (3-MONTH)	%	62	2.3	3.0	-2.1	JAN
66.	NEW CORPORATE BOND YIELD (AA)	%	62	0.9	2.2	-2.4	JAN

HOW TO READ CHARTS

ACTUAL LEVEL CHARTS

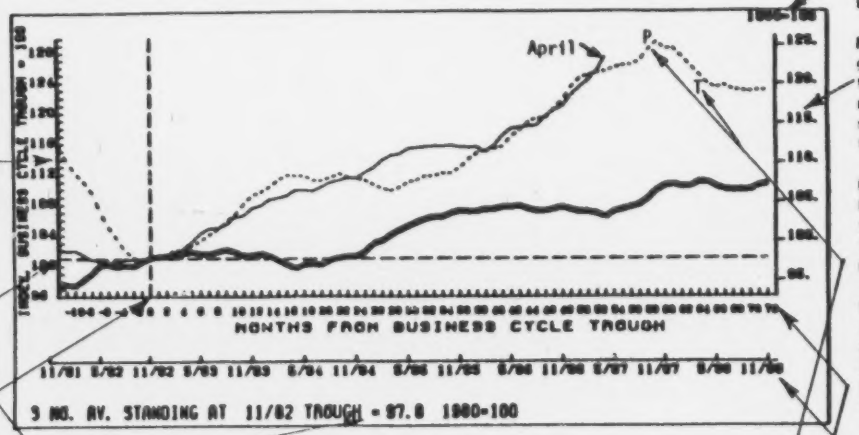
TITLE: If the title does not say "growth rate," then the chart is for the actual level, rather than the growth rate.

LEFT-HAND SCALE measures movements of both current and past expansions, relative to their standing at the respective reference troughs (i.e. for each expansion the standing at the trough equals 100). This is the common vertical scale along which the expansions are compared.

HORIZONTAL DOTTED LINE shows level at reference trough (100) for current and past expansions.

VERTICAL DOTTED LINE represents reference trough dates for current and past expansions, which are all aligned so that the reference trough dates are positioned on the vertical line.

STANDING AT THE TROUGH for the current expansion (when the expansion began) is typically calculated as the 3-month average centered on the trough month.

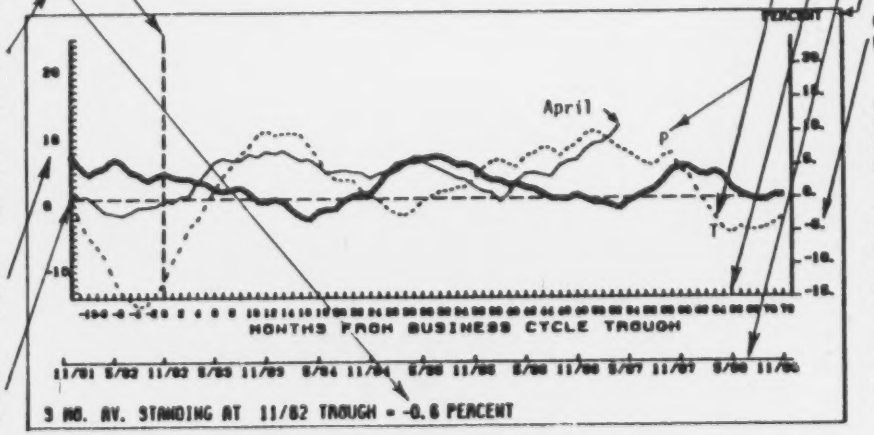


GROWTH RATE CHARTS

TITLE: If the title says "growth rate," then the chart is for the "6-month smoothed growth rate," rather than the actual level. These growth rates are obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

LEFT-HAND SCALE, (same as the right-hand scale) shows growth rates in percent for both current and past expansions.

HORIZONTAL DOTTED LINE is drawn typically at 0% growth rate, a natural reference level for both current and past expansions.



UNIT for right-hand scale, which refers only to the current expansion.

RIGHT-HAND SCALE refers only to current expansion. It is a transformation of the left hand scale to show the current expansion in original units rather than with trough standing = 100.

P indicates the January 1980 PEAK, marking the start of the 1980 recession, which lasted till the July 1980 TROUGH, indicated by T.

HORIZONTAL SCALE measures months from business cycle trough for both the current and the past expansions. This is the common time scale along which the recoveries are compared.

ACTUAL DATES, referring only to the current expansion.

UNIT for both scales (percent), referring to both current and past growth rates in expansions.

RIGHT-HAND SCALE, which refers to both current and past expansions.

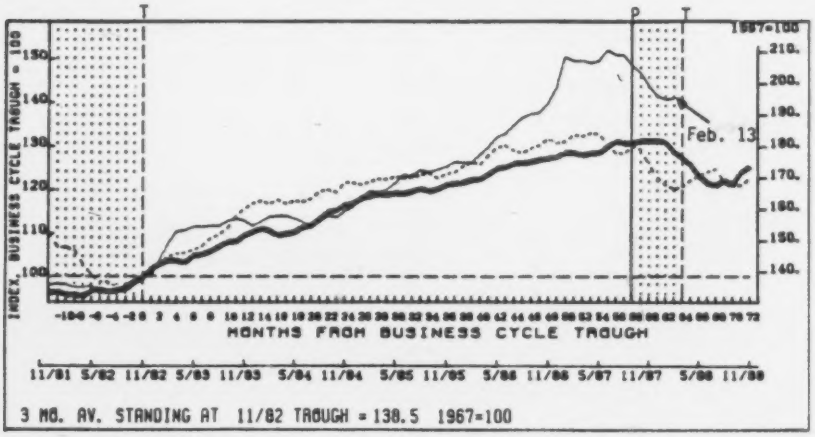
━━━━ THICK LINE indicates 1961-69 expansion (from February 1961) which continued for 106 months.

---------- DOTTED LINE indicates the 1975-80 expansion (from Mar. 1975), which ended after 58 months, and the subsequent recession (from January 1980 to July 1980).

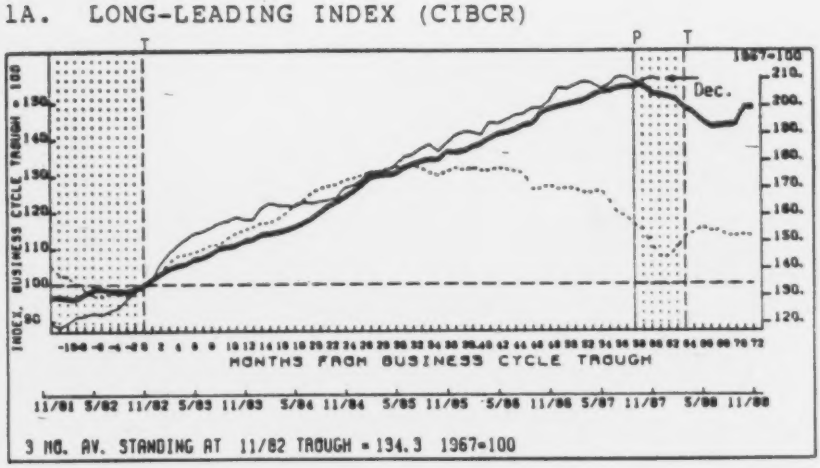
———— THIN LINE indicates the current expansion (business cycle trough: November 1982 or IV Q 1982).

COMPOSITE INDEXES

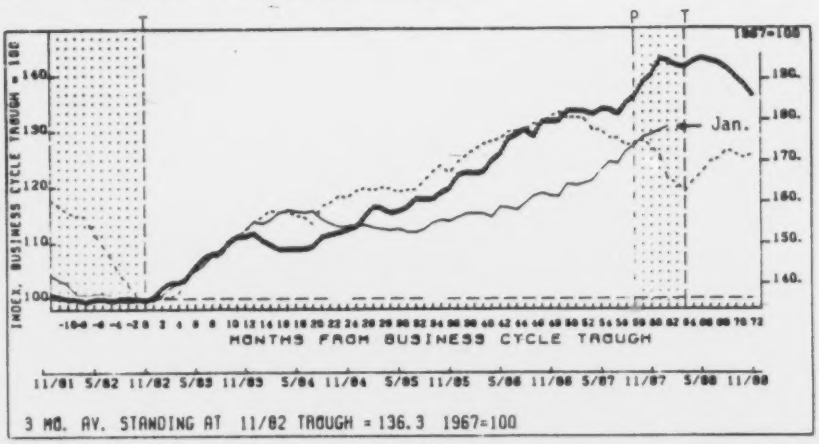
1. BUSINESS WEEK LEADING INDEX (CIBCR)



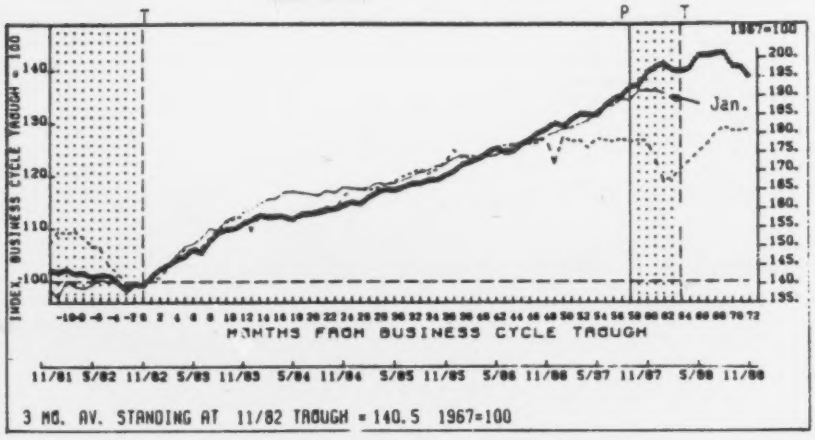
1A. LONG-LEADING INDEX (CIBCR)



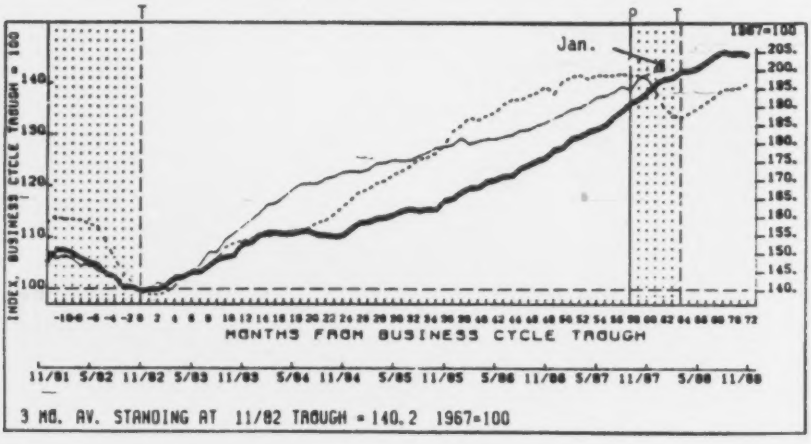
1B. N.A.P.M. LEADING INDEX



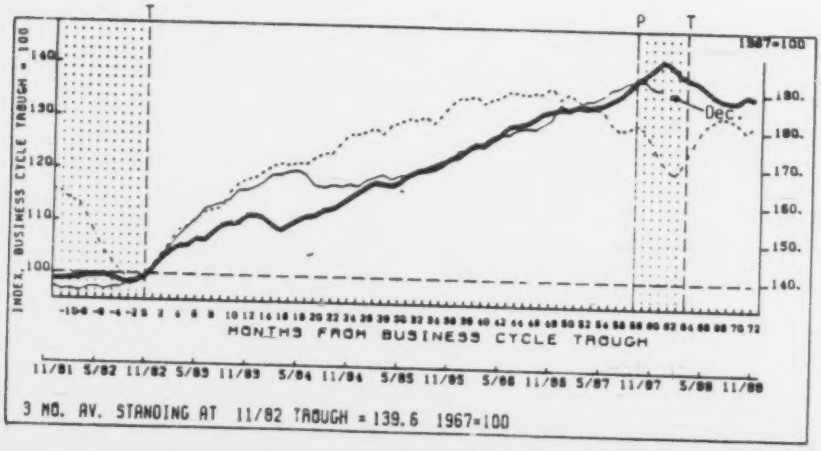
2. LEADING EMPLOYMENT INDEX (CIBCR)


INDEX, BUSINESS CYCLE TROUGH = 100
1967=100
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 S/82 11/82 S/83 11/83 S/84 11/84 S/85 11/85 S/86 11/86 S/87 11/87 S/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.5 1967=100

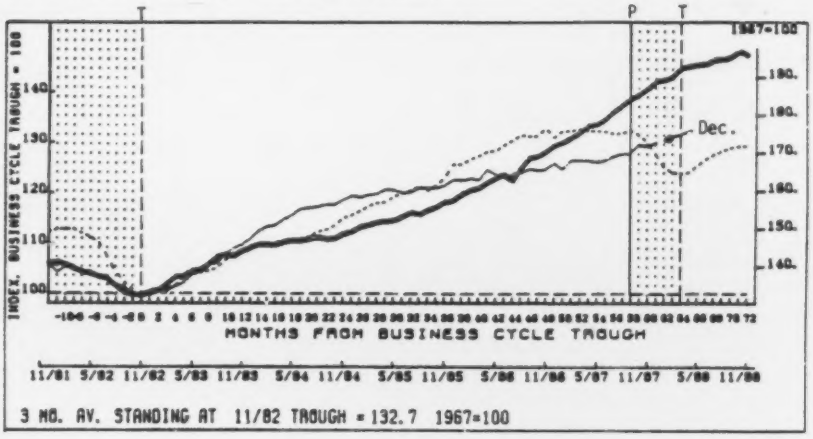
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)


INDEX, BUSINESS CYCLE TROUGH = 100
1967=100
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 S/82 11/82 S/83 11/83 S/84 11/84 S/85 11/85 S/86 11/86 S/87 11/87 S/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.2 1967=100

4. LEADING INDEX (BCD)

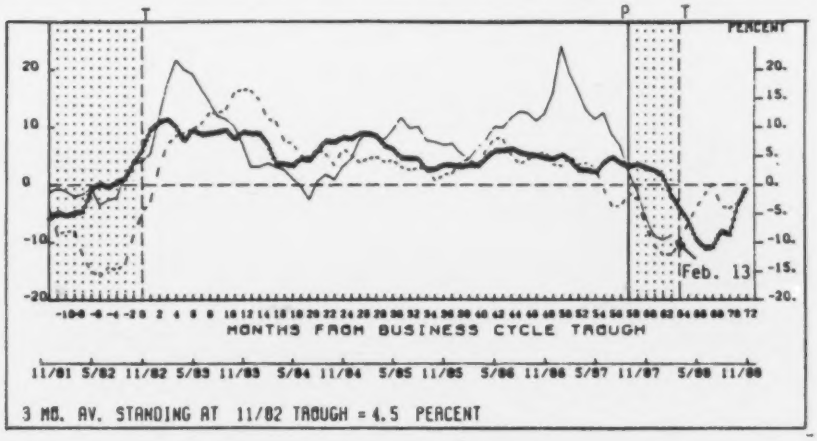

INDEX, BUSINESS CYCLE TROUGH = 100
1967=100
Dec.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 S/82 11/82 S/83 11/83 S/84 11/84 S/85 11/85 S/86 11/86 S/87 11/87 S/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 139.6 1967=100

5. COINCIDENT INDEX (BCD)

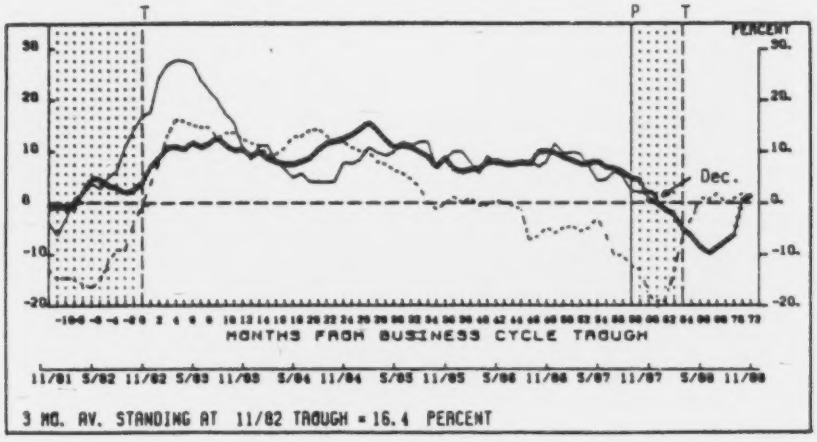


COMPOSITE INDEX GROWTH RATES

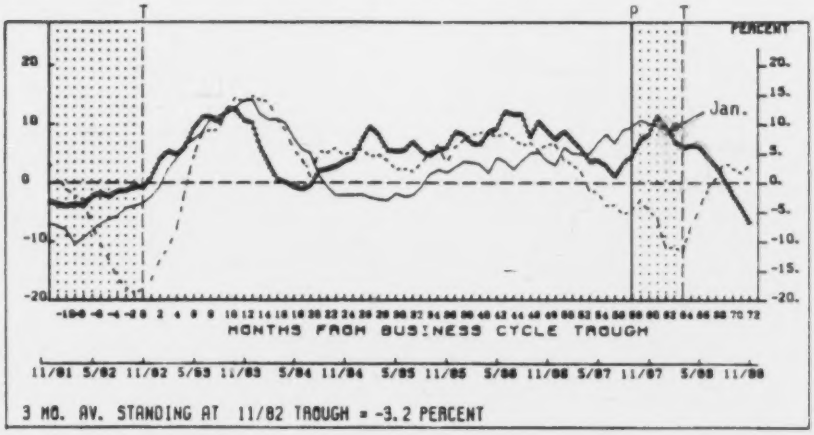
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
Feb. 13
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.5 PERCENT

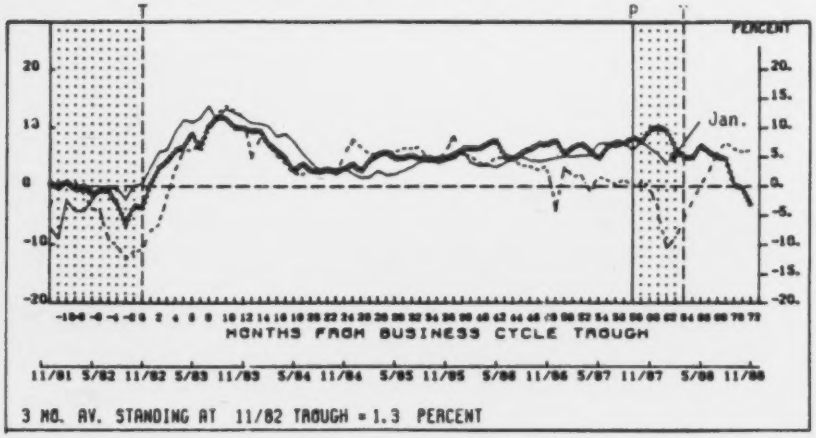
6A. LONG-LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
Dec.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 16.4 PERCENT

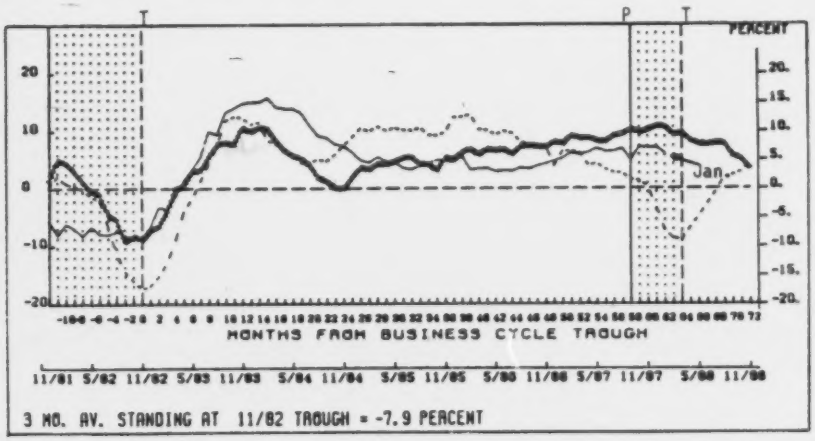
6B. N.A.P.M. LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -3.2 PERCENT

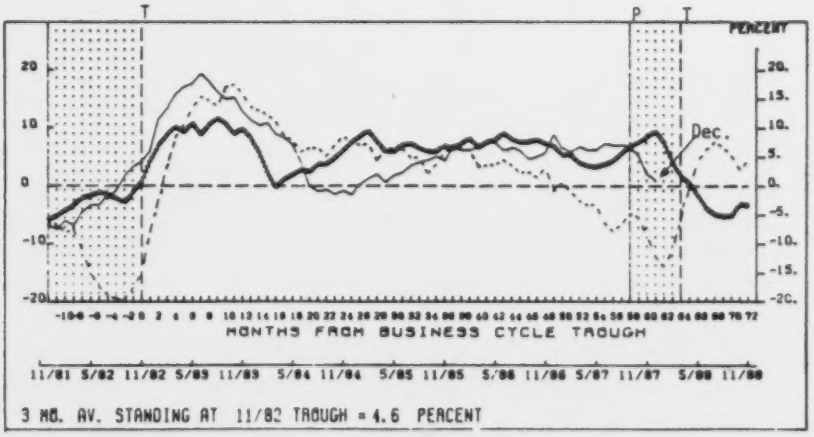
7. LEADING EMPLOYMENT INDEX, GROWTH RATE


T
P
T
PERCENT
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1.3 PERCENT

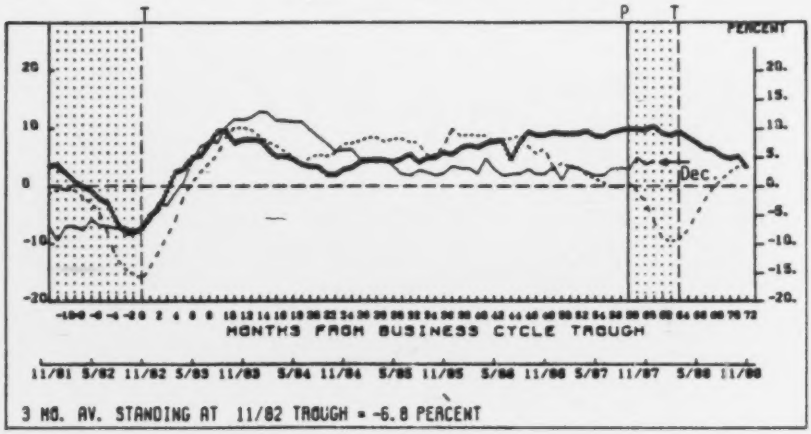
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE (CIBCR)


T
P
T
PERCENT
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -7.9 PERCENT

9. LEADING INDEX, GROWTH RATE (BCD)

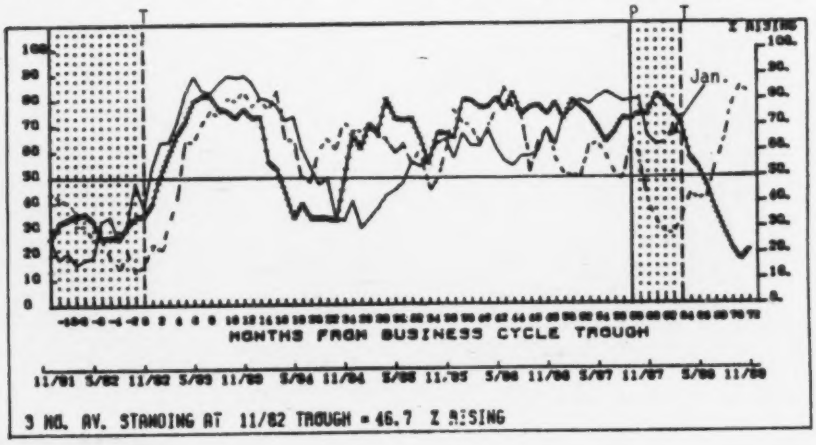

T
P
T
PERCENT
Dec.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.6 PERCENT

10. COINCIDENT INDEX, GROWTH RATE (BCD)

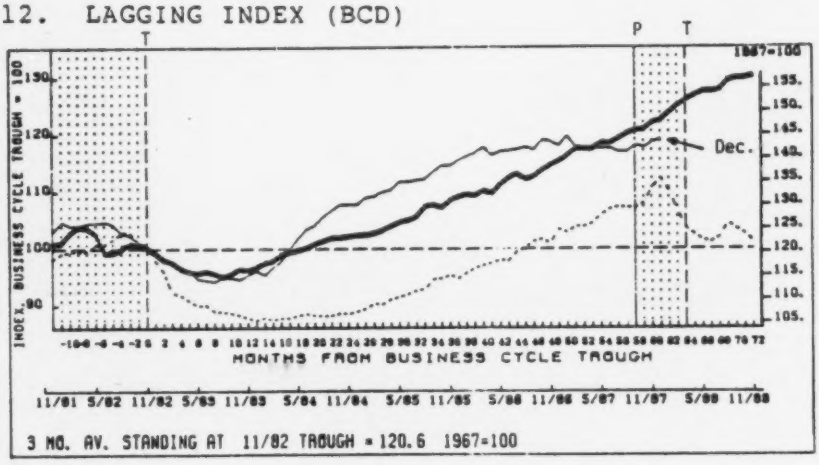


OTHER COMPOSITE INDEXES

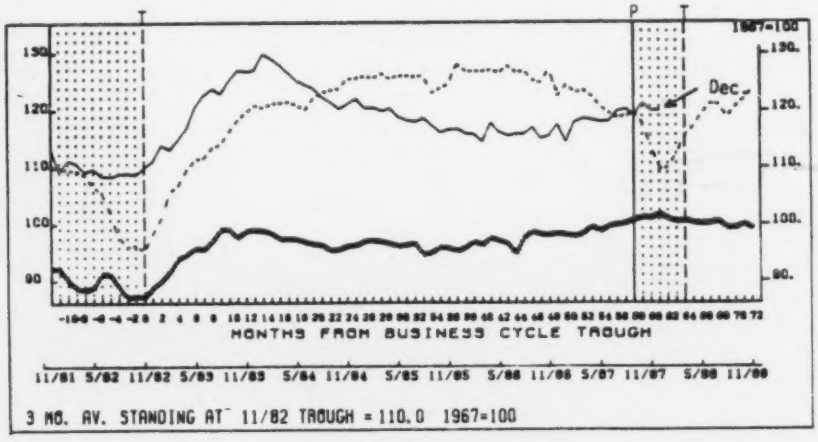
11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)



12. LAGGING INDEX (BCD)

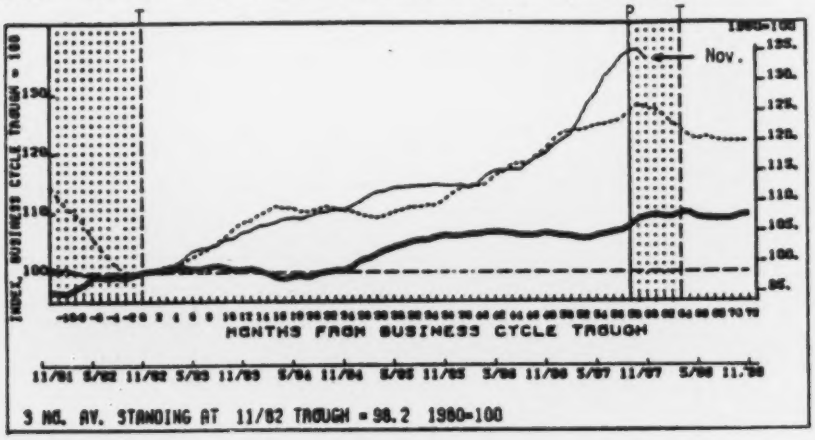


13. RATIO, COINCIDENT TO LAGGING INDEX

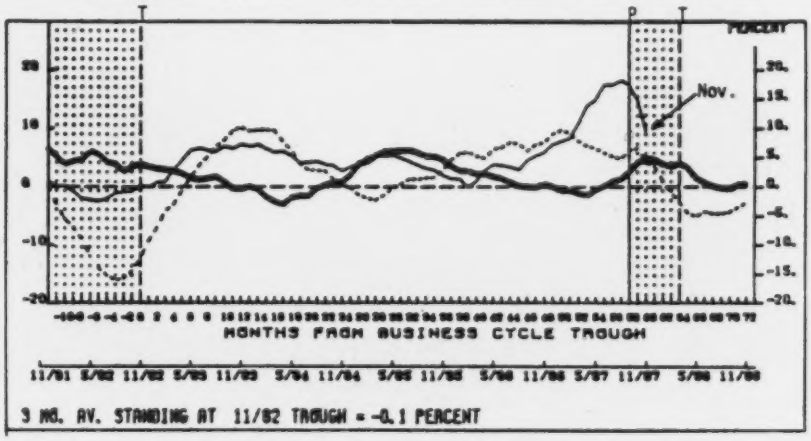


OTHER COMPOSITE INDEXES

14. EIGHT-COUNTRY LEADING INDEX (CIBCR)*



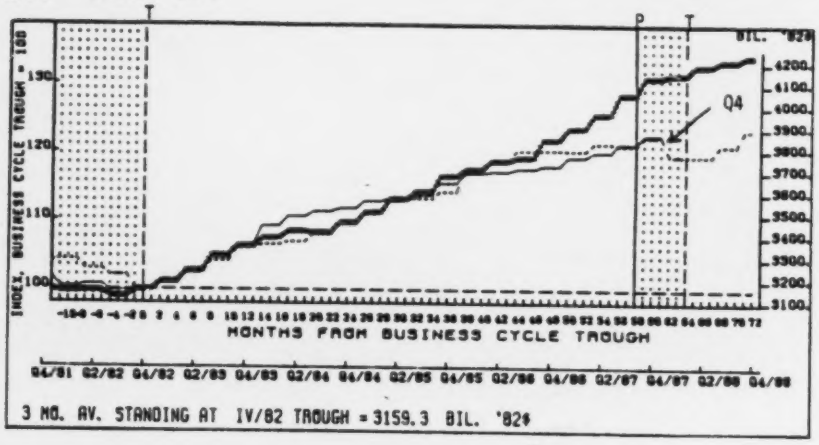
15. EIGHT-COUNTRY LEADING INDEX, GROWTH RATE



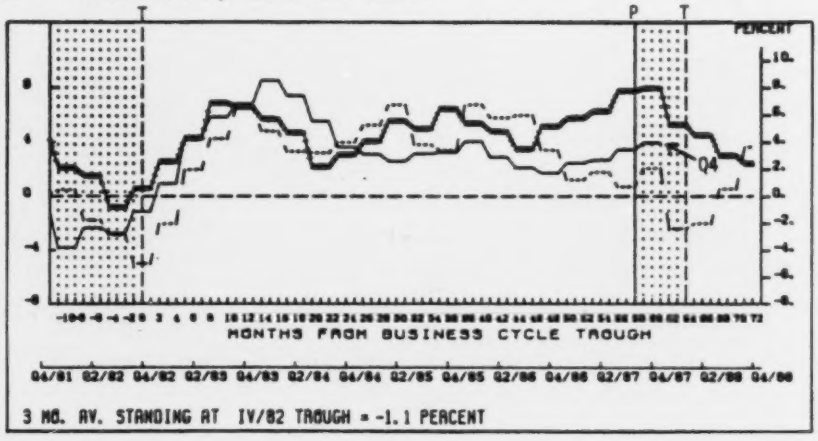
*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia & Taiwan.

OUTPUT, INCOME AND SALES

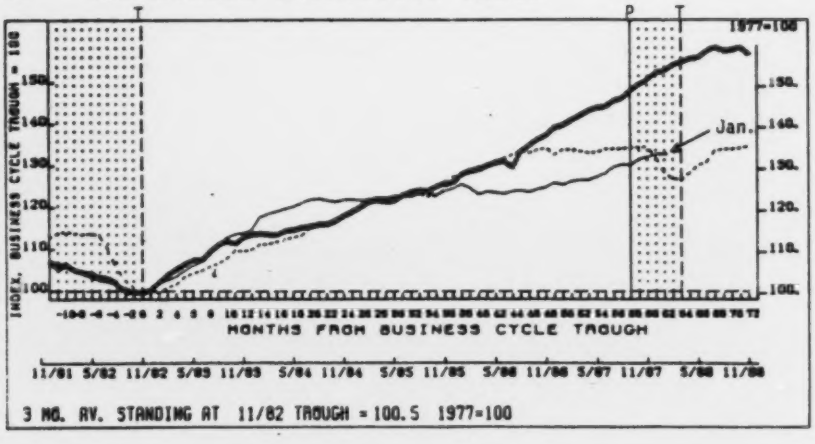
16. REAL GNP



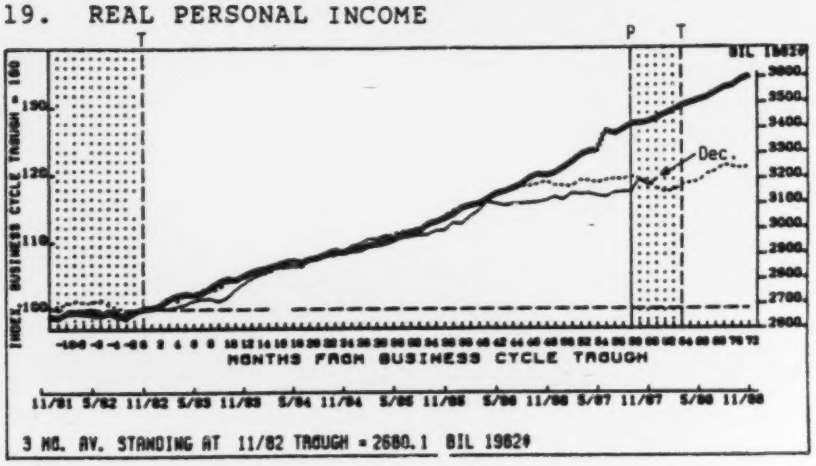
17. REAL GNP, GROWTH RATE



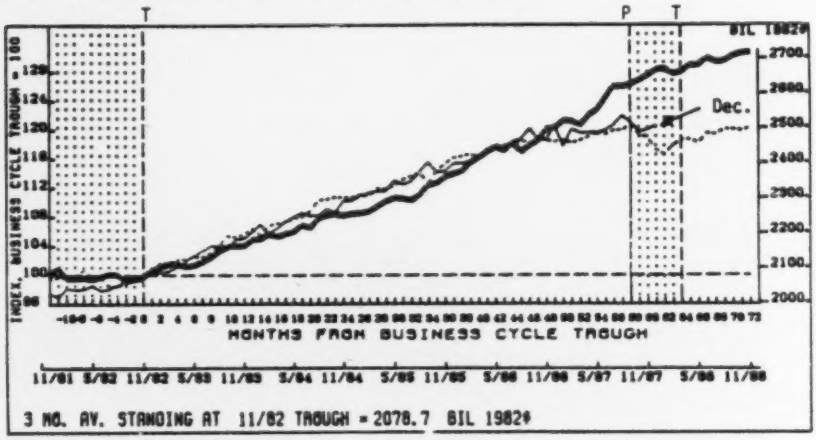
18. INDUSTRIAL PRODUCTION INDEX


INDEX, BUSINESS CYCLE TROUGH = 100
1977=100
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
3 MO. AV. STANDING AT 11/82 TROUGH = 100.5 1977=100

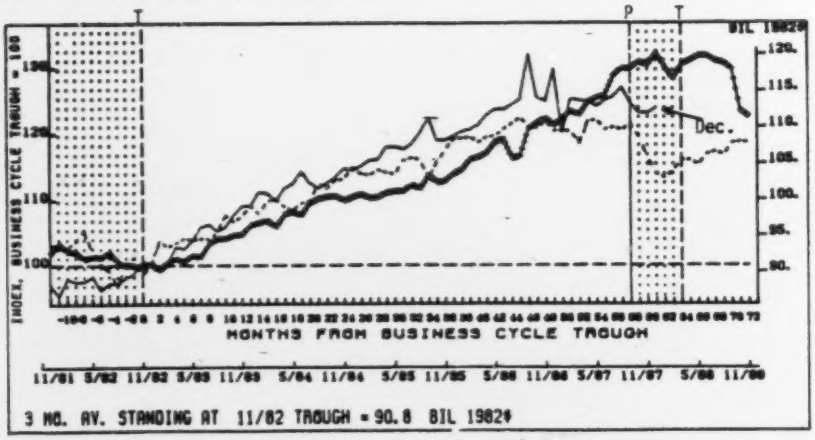
19. REAL PERSONAL INCOME



20. REAL CONSUMER EXPENDITURES

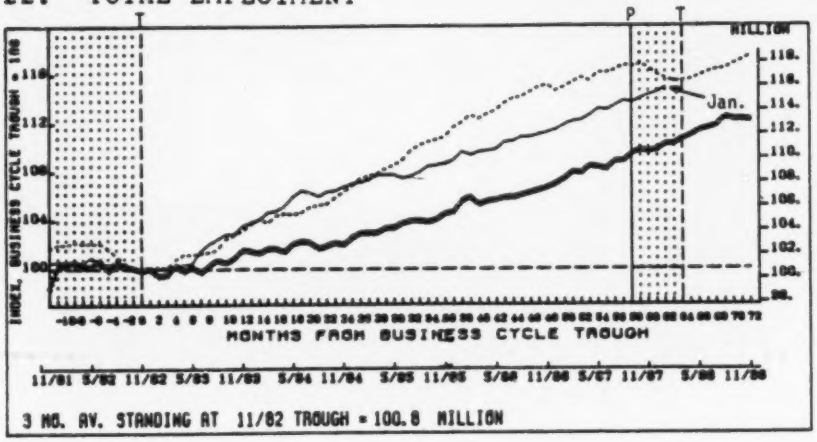


21. REAL RETAIL SALES

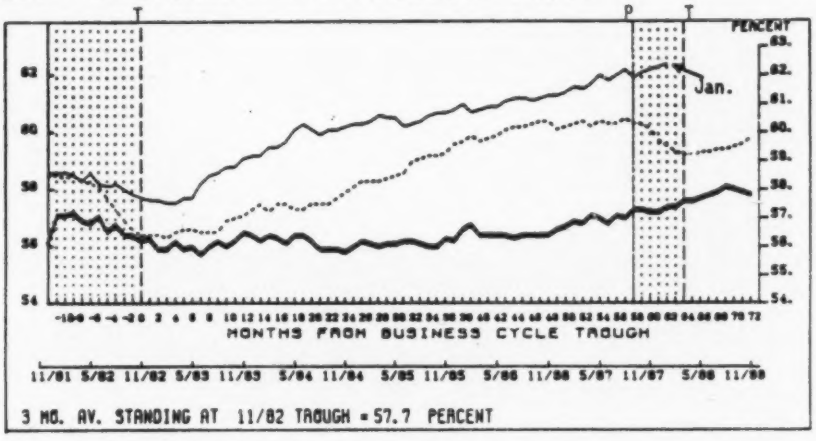


EMPLOYMENT

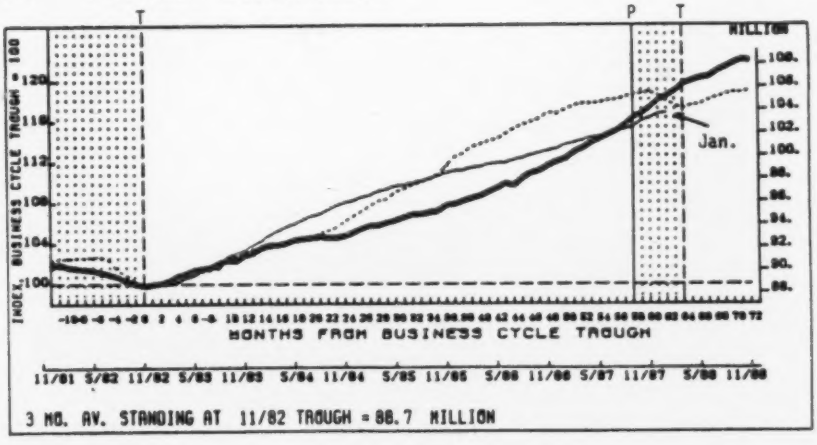
22. TOTAL EMPLOYMENT



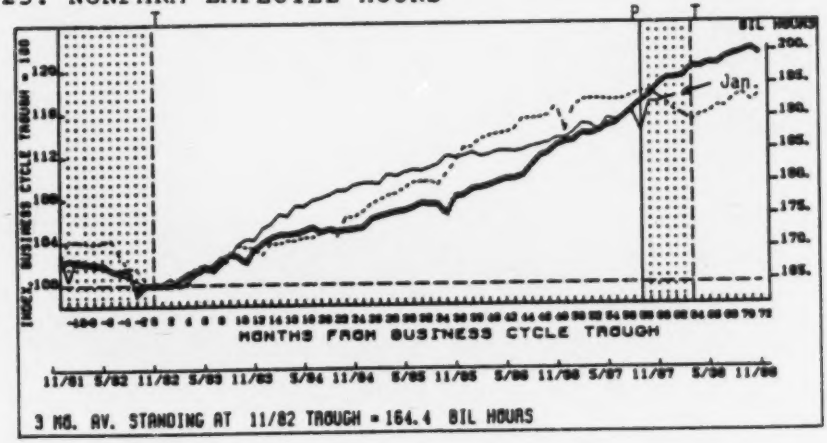
23. EMPLOYMENT TO POPULATION RATIO



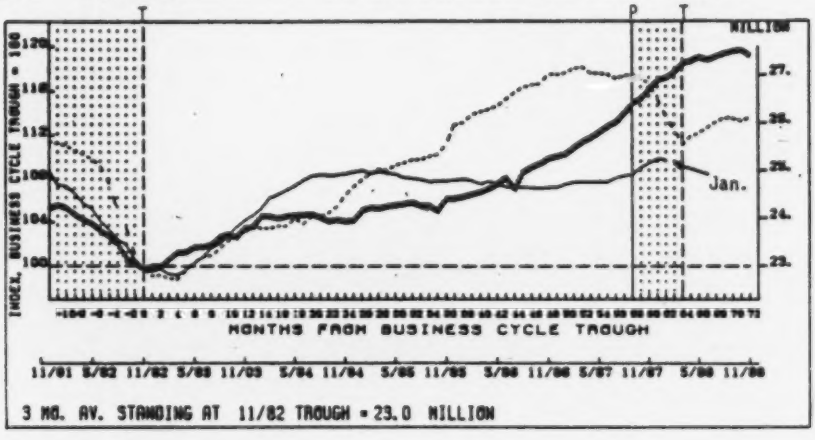
24. NONFARM EMPLOYMENT



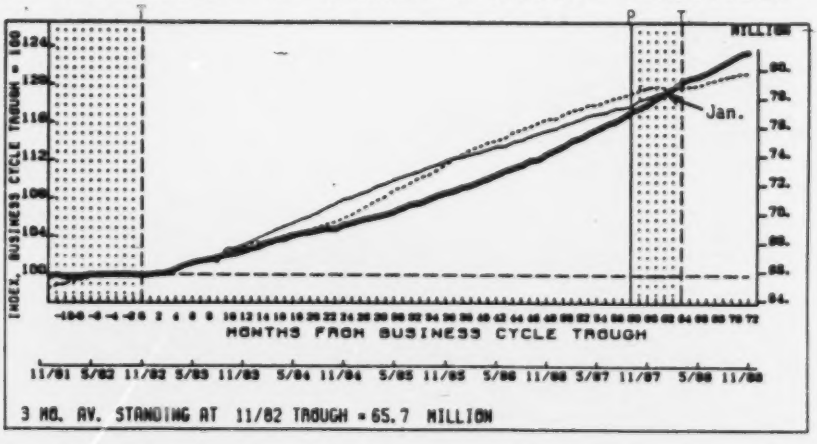
25. NONFARM EMPLOYEE HOURS


INDEX, BUSINESS CYCLE TROUGH = 100
BIL HOURS
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
3 MO. AV. STANDING AT 11/82 TROUGH = 164.4 BIL HOURS

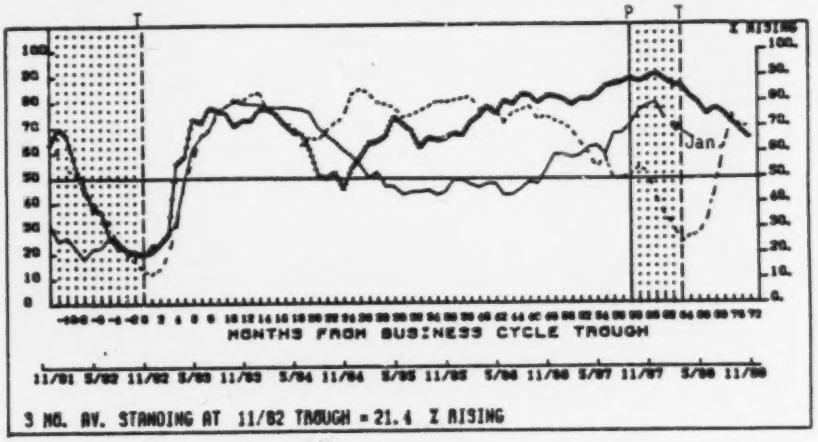
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES


INDEX, BUSINESS CYCLE TROUGH = 100
MILLION
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
3 MO. AV. STANDING AT 11/82 TROUGH = 23.0 MILLION

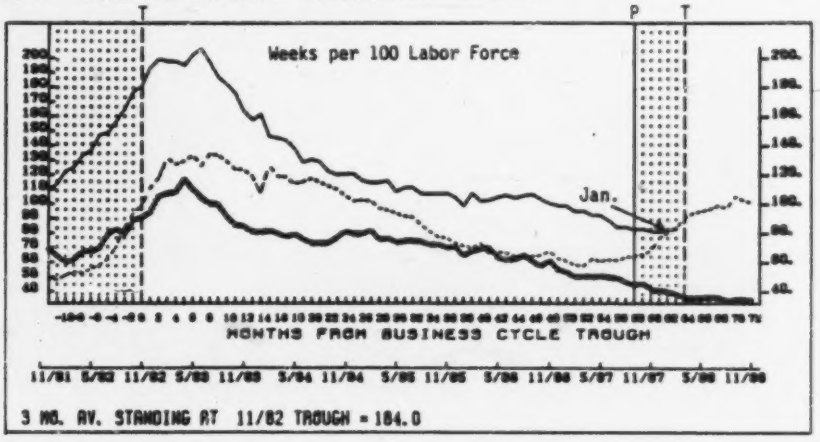
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES


INDEX, BUSINESS CYCLE TROUGH = 100
MILLION
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
3 MO. AV. STANDING AT 11/82 TROUGH = 65.7 MILLION

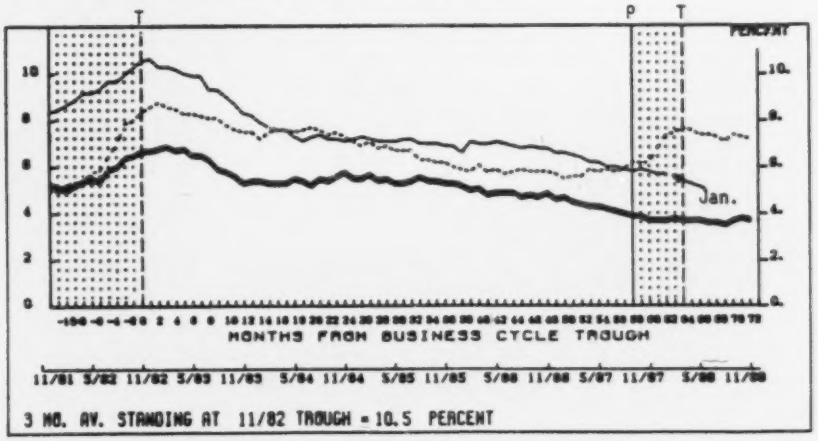
28. EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES



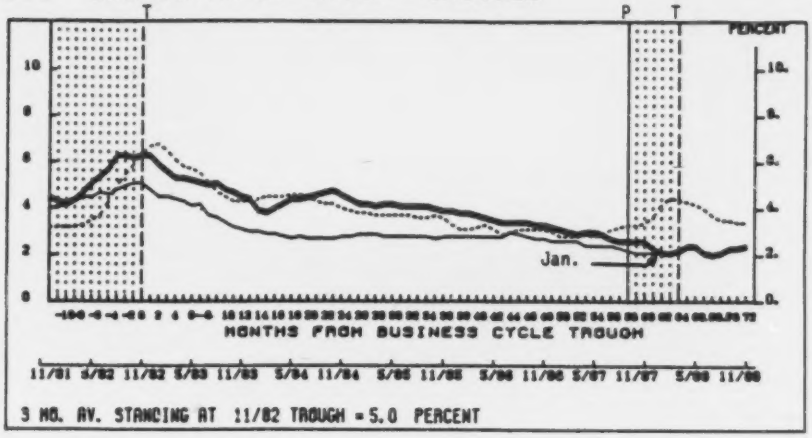
29. UNEMPLOYMENT SEVERITY INDEX



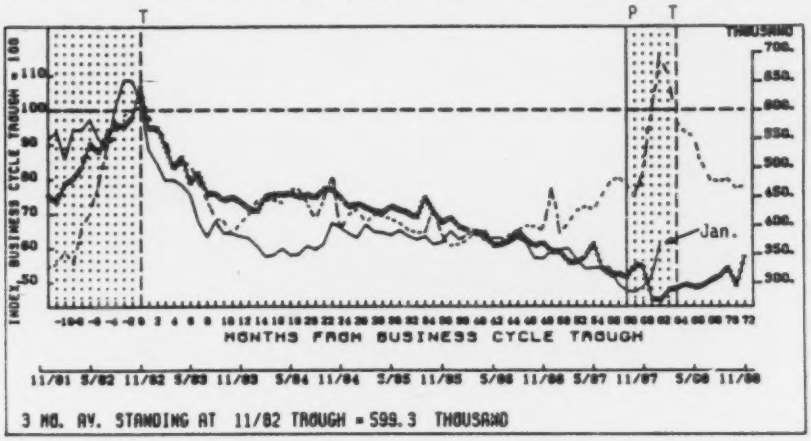
30. UNEMPLOYMENT RATE: TOTAL



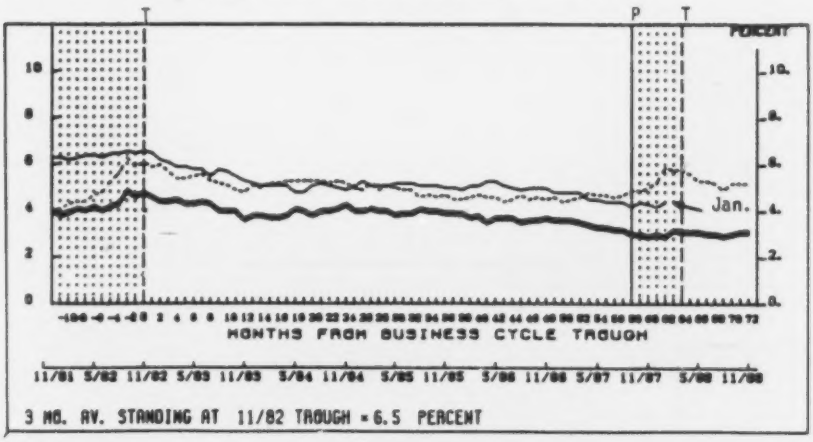
31. UNEMPLOYMENT RATE: INSURED



32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE

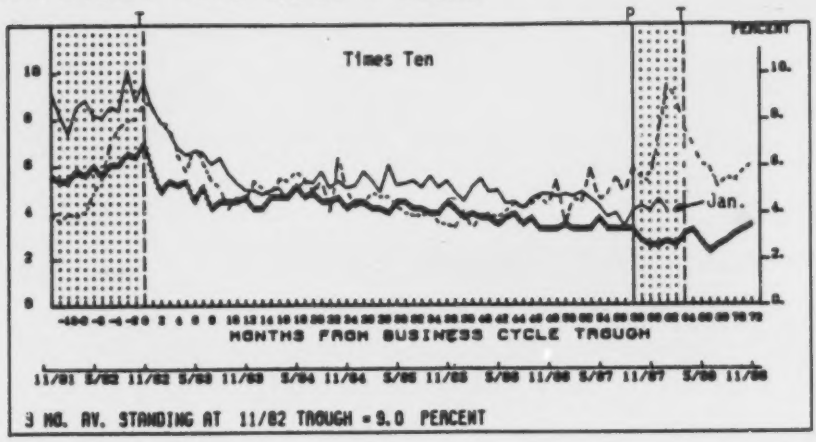


33. SHORT-DURATION UNEMPLOYMENT RATE

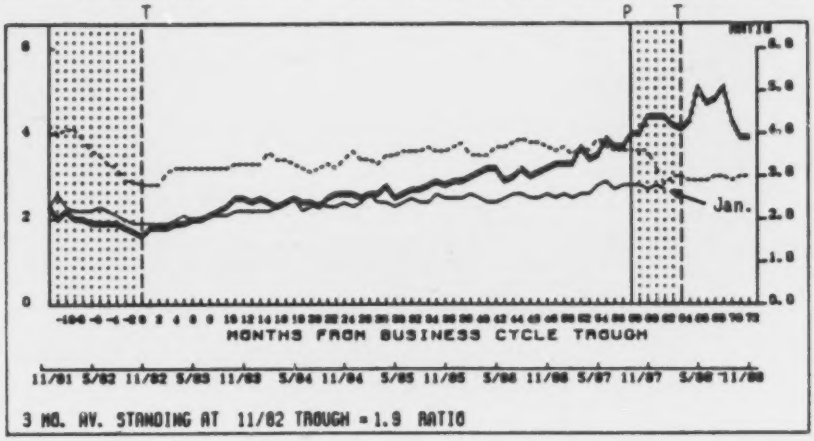


OTHER LEADING EMPLOYMENT INDICATORS

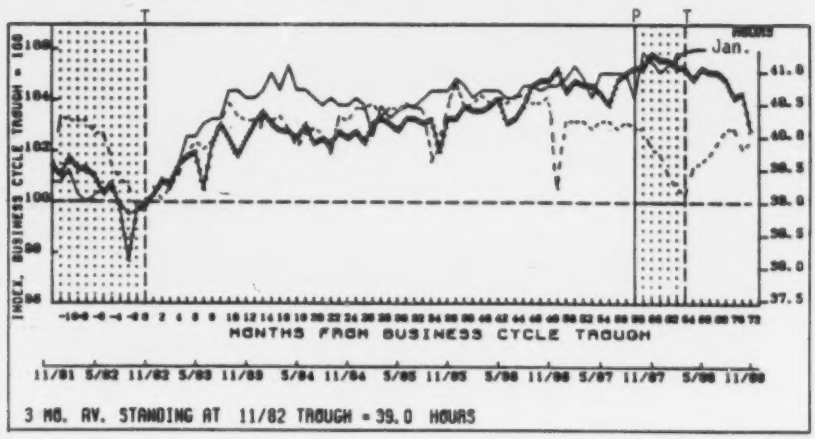
34. LAYOFF RATE UNDER 5 WEEKS



35. VOLUNTARY TO INVOLUNTARY PART-TIME EMPLOYMENT RATIO

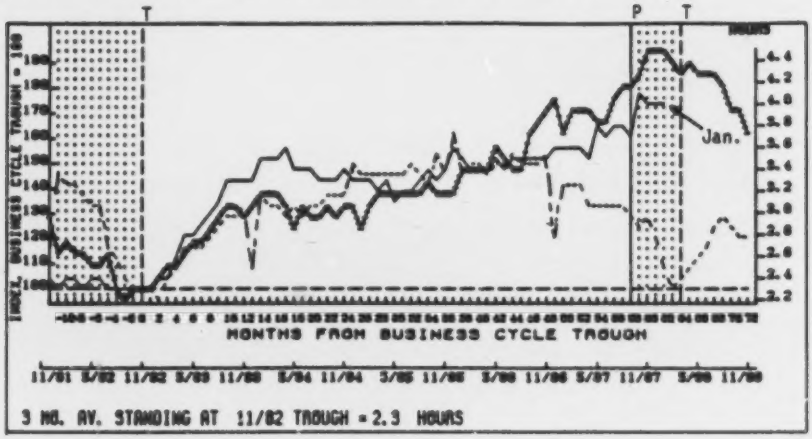


36. AVERAGE WORKWEEK, MANUFACTURING



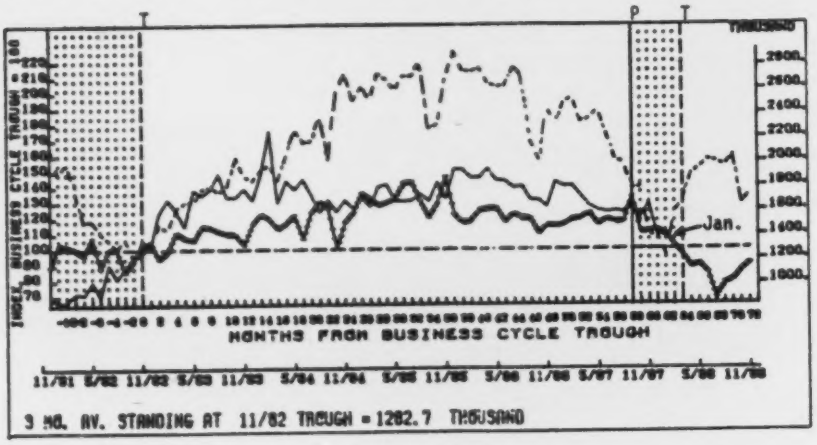
OTHER LEADING EMPLOYMENT INDICATORS, continued

37. OVERTIME HOURS, MANUFACTURING

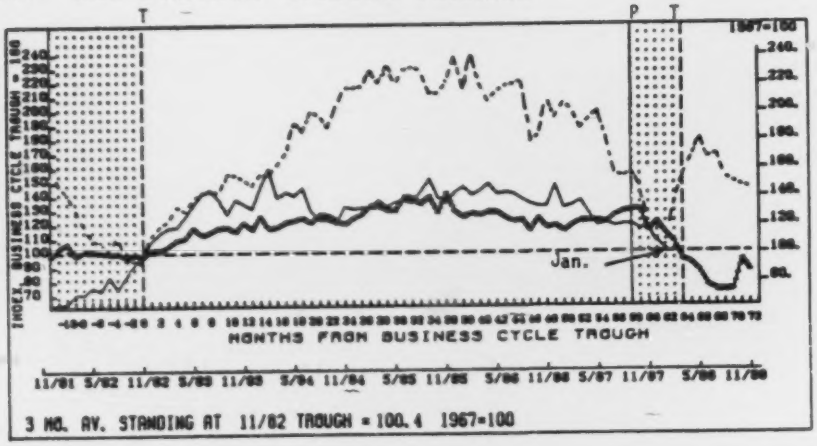


INVESTMENT COMMITMENTS AND INVENTORIES

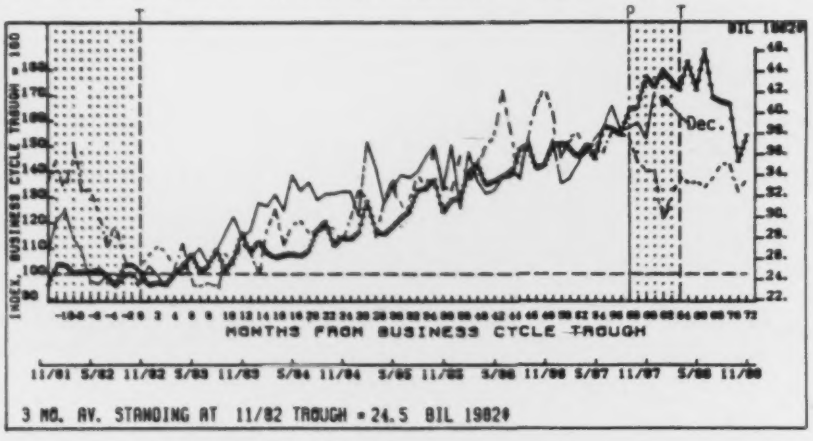
38. NEW PRIVATE HOUSING STARTS



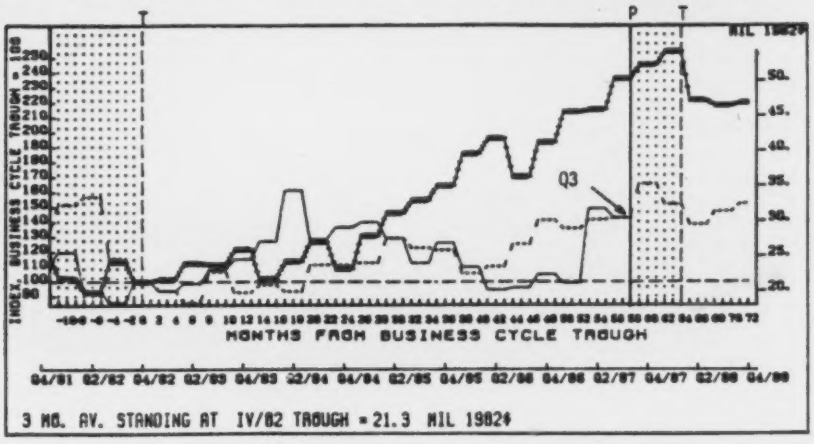
39. NEW PRIVATE HOUSING PERMITS



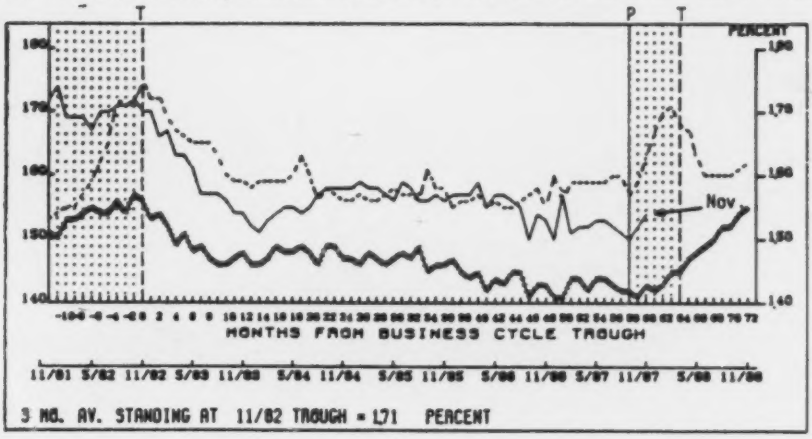
40. CONTRACTS & ORDERS, PLANT & EQUIPMENT



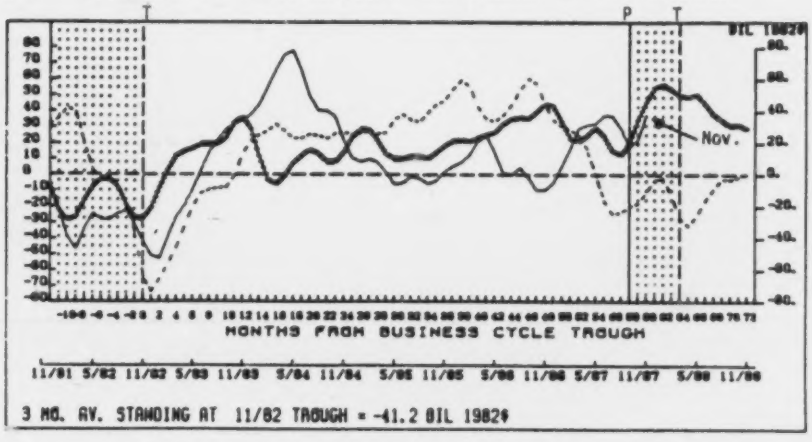
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING



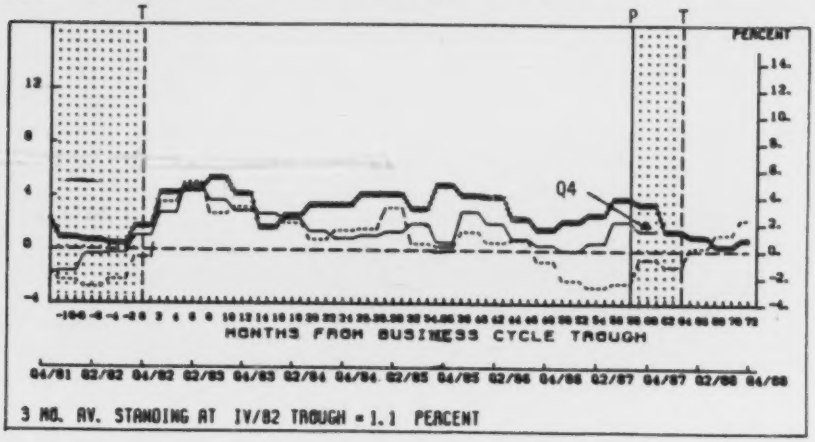
42. INVENTORY/SALES RATIO, MANUFACTURING AND TRADE



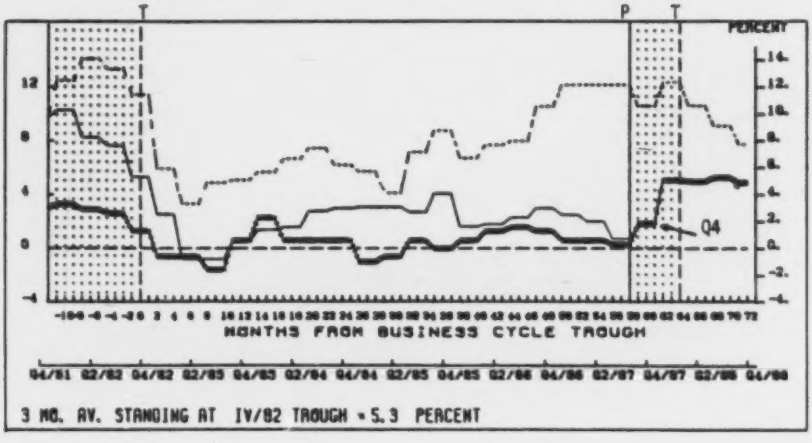
43. CHANGE IN INVENTORY ON HAND & ON ORDER



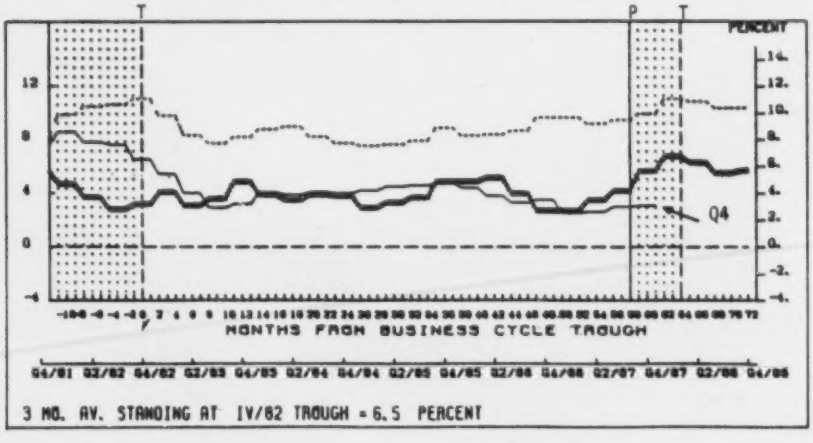
44. OUTPUT PER HOUR, GROWTH RATE



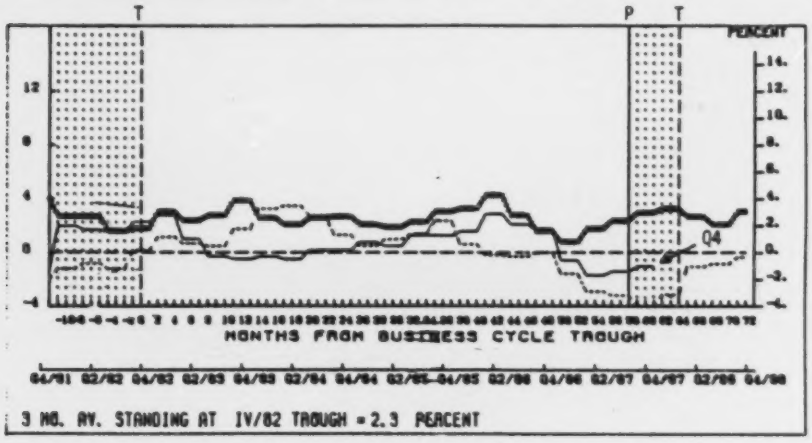
45. UNIT LABOR COSTS, GROWTH RATE



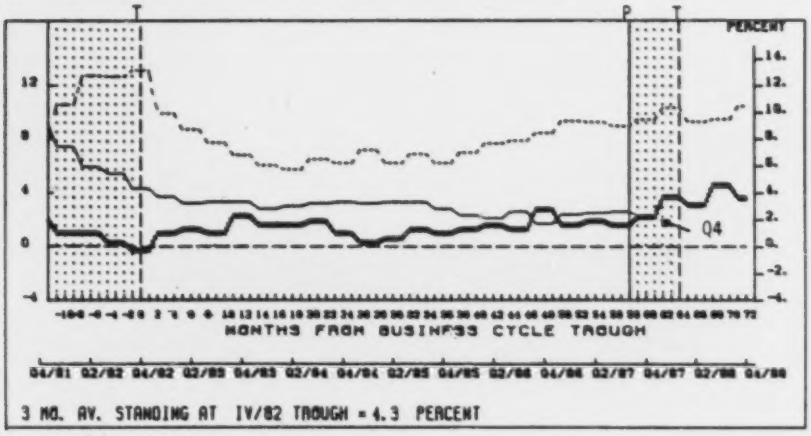
46. HOURLY COMPENSATION, GROWTH RATE



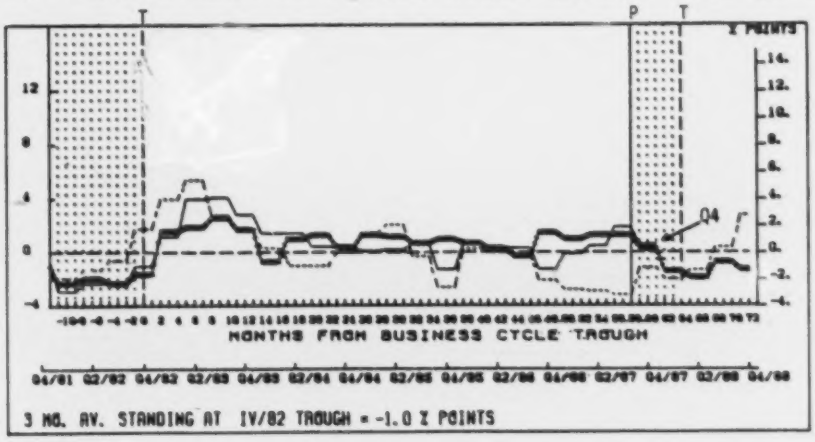
47. REAL HOURLY COMPENSATION, GROWTH RATE



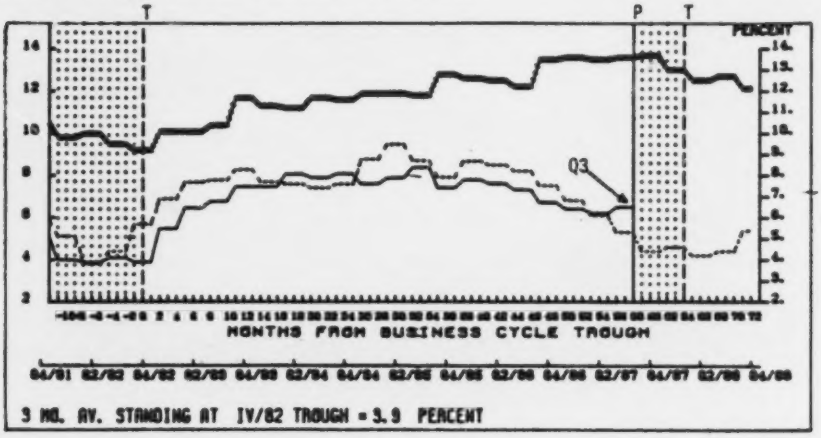
48. SELLING PRICE INDEX, GROWTH RATE



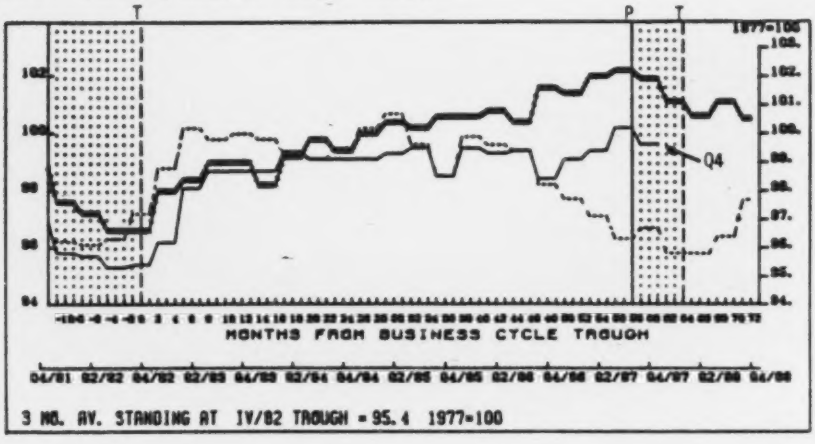
49. GROWTH RATE IN PRICES MINUS GROWTH RATE IN COSTS



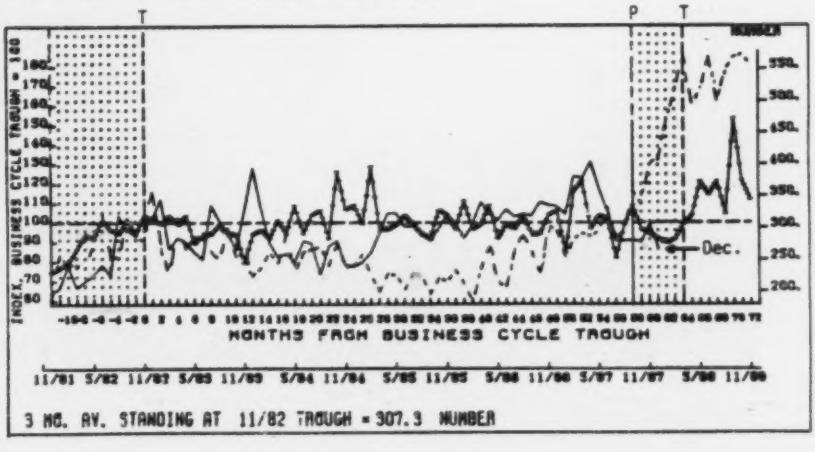
50. CORPORATE PROFIT MARGIN



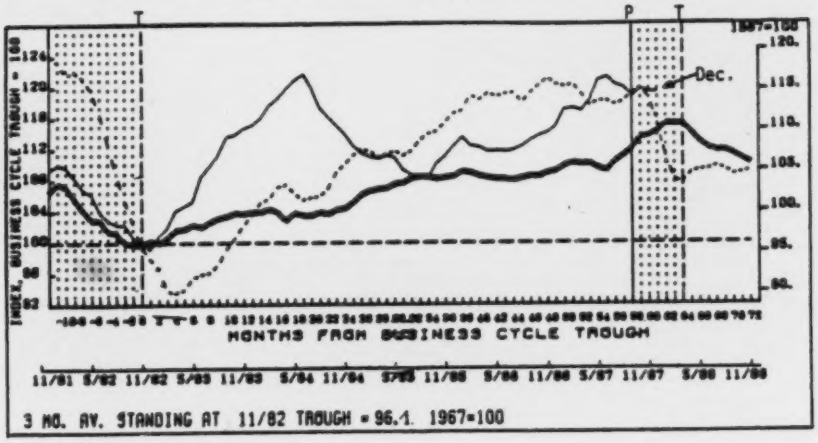
51. PRICE/LABOR COST RATIO



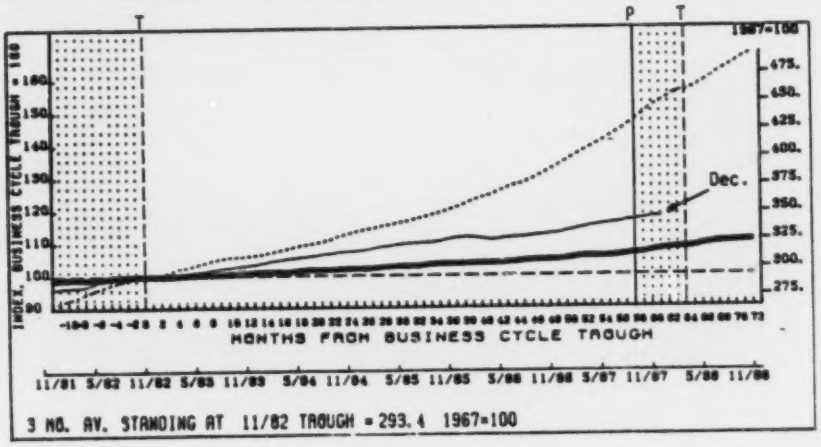
52. LARGE BUSINESS FAILURES



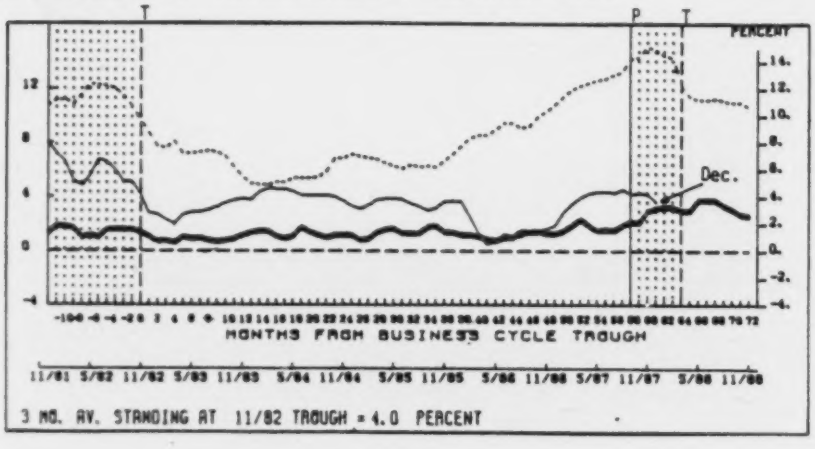
53. LEADING INDEX OF INFLATION (CIBCR)



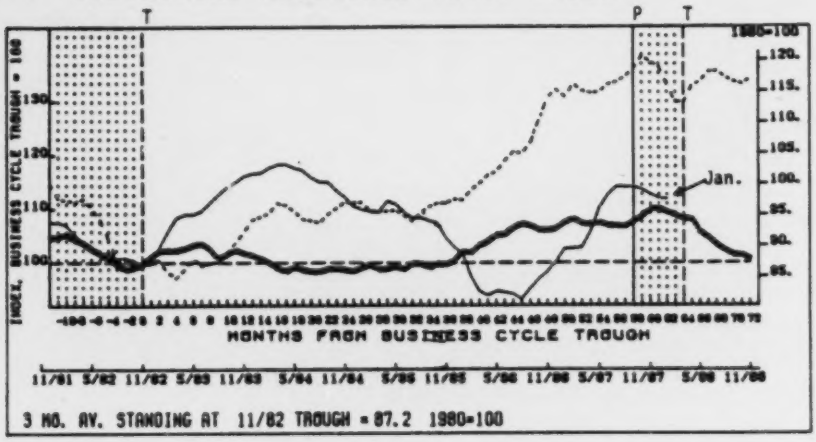
54. CONSUMER PRICE INDEX



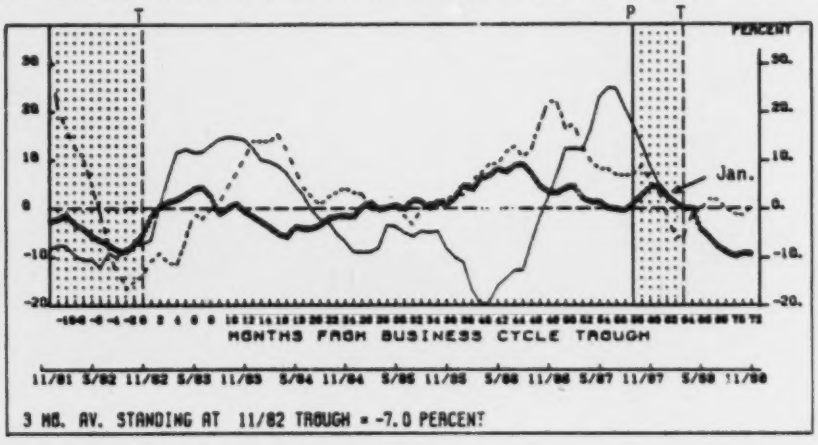
55. CONSUMER PRICE INDEX, GROWTH RATE



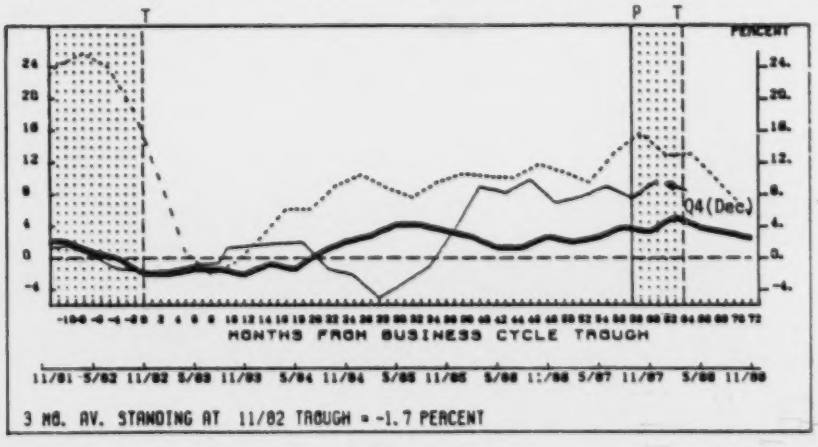
56. INDUSTRIAL MATERIALS PRICE INDEX



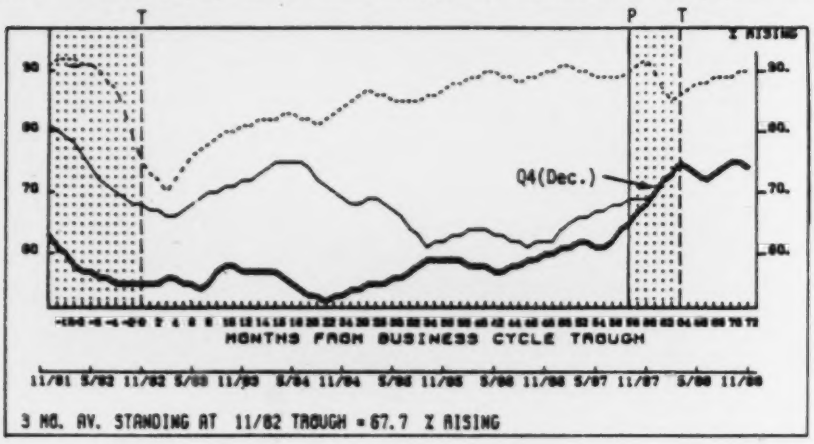
57. INDUSTRIAL MATERIALS PRICE INDEX, GROWTH RATE



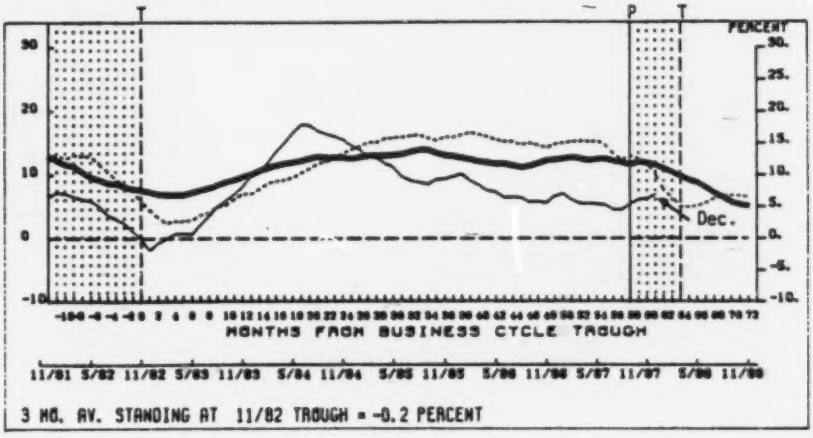
58. IMPORT PRICE INDEX (EXCLUDING FUELS), GROWTH RATE



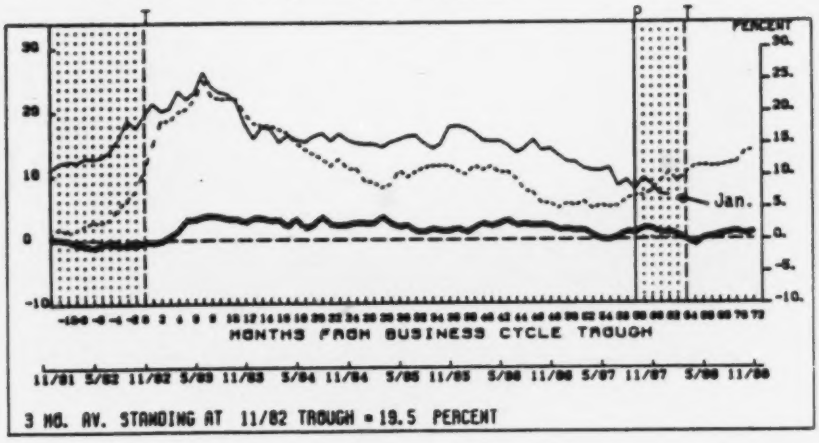
59. BUSINESSMEN'S ANTICIPATED SELLING PRICES (SURVEY)



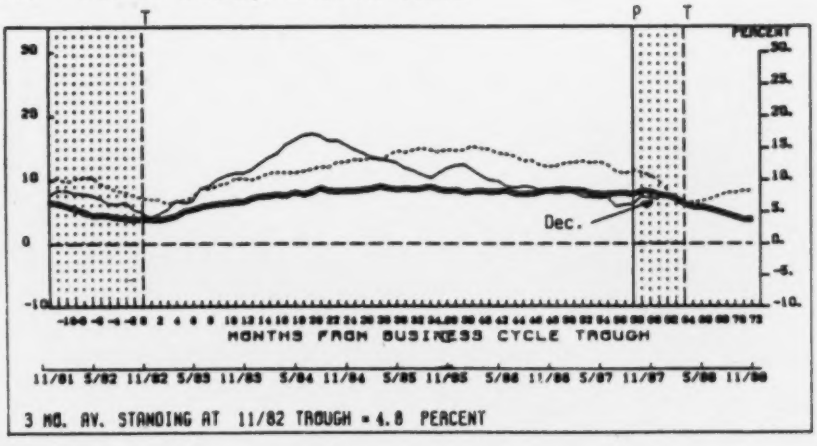
60. BUSINESS & CONSUMER DEBT, GROWTH RATE


T
P
T
PERCENT
Dec.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -0.2 PERCENT

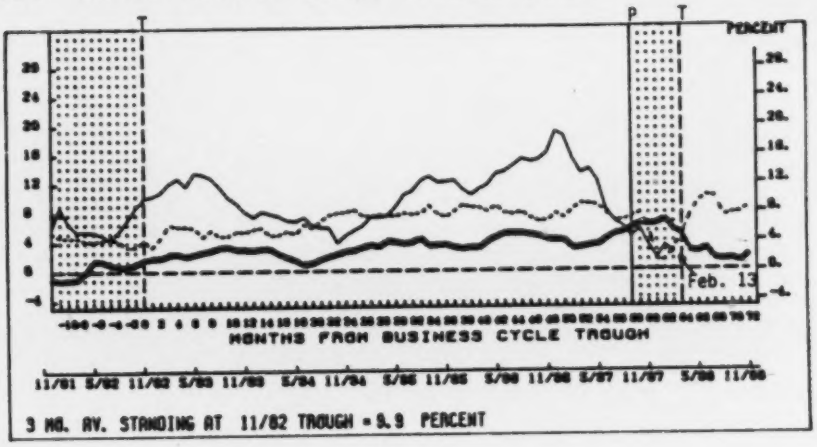
61. FEDERAL DEBT, GROWTH RATE


T
P
T
PERCENT
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 19.5 PERCENT

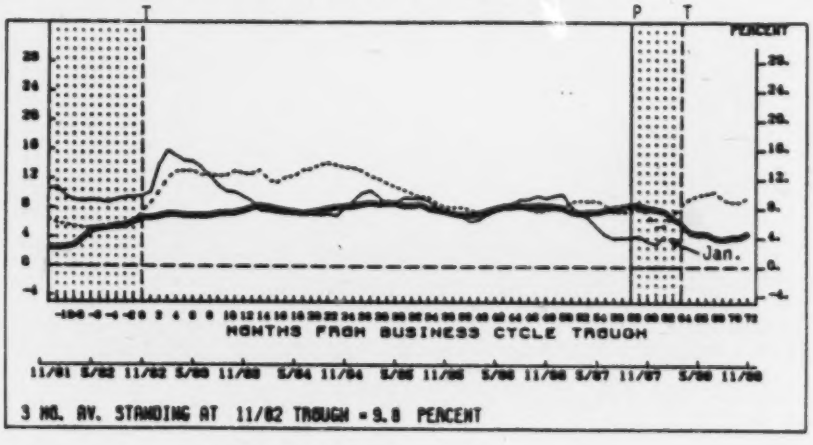
62. TOTAL DEBT, GROWTH RATE


T
P
T
PERCENT
Dec.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.8 PERCENT

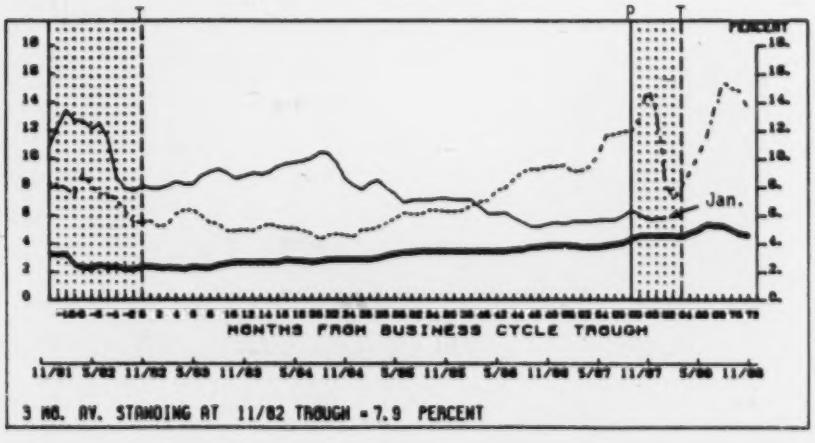
63. MONEY SUPPLY (M1), GROWTH RATE



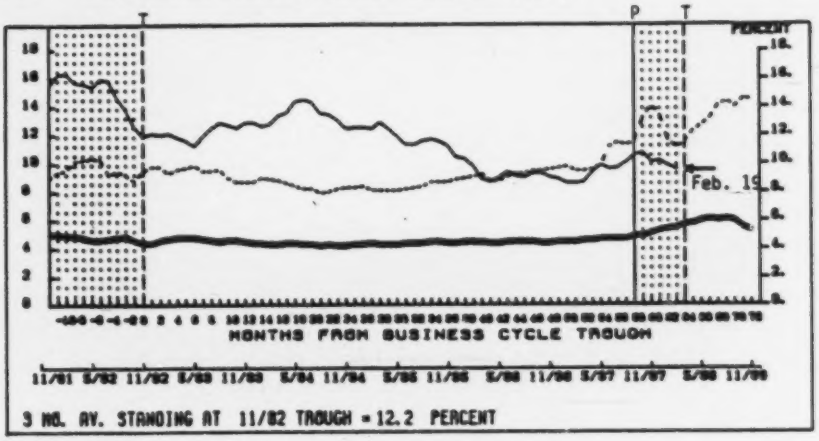
64. MONEY SUPPLY (M2), GROWTH RATE



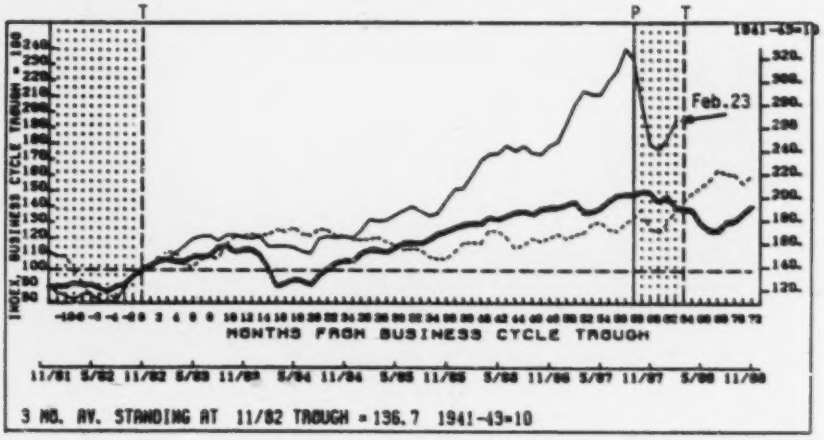
65. TREASURY BILL RATE (3-MONTH)



66. NEW CORPORATE BOND YIELD (AA)



67. COMMON STOCK PRICE INDEX (S&P 500)



CIBCR

RECESSION-RECOVERY WATCH...

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Center for International Business Cycle Research
Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1984 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

**A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions**

Published by the Center for International Business Cycle Research,
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 10, No. 2
April 1988

Summary

The long-awaited economic slowdown is more apparent than real, judging from recent quarterly, monthly and weekly data on production and employment. The leading indexes also are a mixed bag, with one index still showing weakness, two showing moderate strength, and two reaching new highs. A revised leading inflation index has leveled off, suggesting that the economic pressures for and against a rising inflation rate are roughly equal.

Slowdown, Where Is Thy Sting?

Although real GNP growth slowed in the first quarter, the threat of recession receded. In fact, the slowdown was in part a statistical reflection of the spurt in the fourth quarter. The widely reported quarter-to-quarter change fell from an annual rate of 4.8% in the fourth quarter to 2.3% in the first. Using our standard method of computing growth rates, which compares the current level with the average of the preceding four quarters, the rate fell from 4.1% to 3.4%. Either way it was a slowdown, but by our rate, which smoothes out the fluctuations in the preceding quarters, the slowdown was much less drastic.

Moreover, the slowdown is even harder to detect in monthly figures. Our coincident index of employment, which includes five comprehensive measures of employment and unemployment, produced a growth rate of 6.5% in March, computed by our standard method. This is not a slowdown by almost any standard, though it is a bit below the high of 7.3% reached last October. This measure of labor market conditions has the advantage not only of prompt availability (figures for the preceding month are available on the

first Friday of the following month) but also of infrequent revision and freedom from the uncertainties of productivity measurement in a services-oriented economy. Also, by incorporating data derived from three independent sources--the household survey, the establishment survey, and the unemployment insurance system--the composite index blends their various qualities and deficiencies. This cannot produce a perfect measure, but is safer than relying upon a single source. At any rate, the composite is showing considerable strength in employment.

The Business Week production index is another composite that is doing well. It's latest growth rate, based on the four-week average ending April 16, was 7.3% at annual rate. This is down a bit from the March 5th high of 8.7%, but doesn't look disastrous. The Federal Reserve index of industrial production, which the weekly index tracks quite well, had a growth rate of 5.0% in March. This too is down from its high of 6.8% in December. Slowdowns sometimes come easy.

Leading Indicators Less Pessimistic

The Business Week leading index signaled slowdown or recession in September when its growth rate (LGR) dropped to 2.1%. That met the required level (below 2.3%) for the first signal in our three-alarm signal system, described in the February issue of Recession-Recovery Watch. The second signal occurs when LGR goes below -1.0% and the weekly production index rate (CGR) goes below 2.3%. LGR went down to -1.9% in October but CGR has remained well over 2.3%, as noted above. So the second signal has not been tripped. Meanwhile the weekly leading index has recovered somewhat. LGR reached its low to date, -9.8%, in January and by April 16 it was only -5.3%. This is still not an optimistic reading, but other leading indexes have become more positive. The March growth rates in our leading employment index and the BCD leading index were 3.8% and 2.9%, respectively. The April growth rate in the NAPM leading index climbed to 5.8%.

The biggest reversal of all has been displayed by our long-leading index. It hit the slowdown trail last September, stayed depressed until January, but picked up sharply in February. The index itself reached an all-time high then, and its growth rate jumped to 5.9%. The March index remained the same and the growth rate inched down to 5.3%. Perhaps the long-leading index is telling the shorter leading indexes, as it has in the past, that they had better get on the bandwagon. It certainly is not signaling recession any time soon.

A New Leading Inflation Index

CIBCR has been testing a revised leading inflation index that includes two additional components. Both are based on the monthly survey conducted by the National Association of Purchasing Management. Their members' report on buying prices has proved to be a consistent leading indicator of consumer price inflation, according to a recent CIBCR study by Philip A. Klein and Geoffrey H. Moore. Similarly, the NAPM series on vendor performance, which indicates whether deliveries are speeding up or slowing down, also is a good leading indicator of inflation. A slowdown in deliveries generally means that orders are climbing and inventories are getting short, making the climate good for an increase in prices. Including the two NAPM series in the leading inflation index increases the number of components to seven, makes it easier to keep up to date, and improves its performance slightly. The leads are longer at seven of the 19 turns since 1949, shorter at two, and the same at ten. The average lead at inflation peaks and troughs is seven months instead of six (see Table A.)

The revised index is still experimental. We are considering replacing the debt series, which includes business, consumer and Federal debt but omits long-term corporate and municipal bonds, with a more comprehensive series, domestic nonfinancial debt. Other changes may also be made. Nevertheless, the index with the two new components discussed above has a good track record. It anticipated the current inflation upswing, which began in April 1986, by eight months. After climbing until June 1987 it leveled off. Hence it is currently suggesting that inflation may remain close to 4%, awaiting new developments either on the cost or demand side.

TABLE A.

REVISED LEADING INFLATION INDEX WITH SEVEN COMPONENTS: LEAD OR LAG AT INFLATION TURNING POINTS, 1949-86

Dates of Inflation Turning Points (1)		Revised Leading Inflation Index Dates of Turning Points (2)		Lead (-) or Lag (+), in months (3)	
Trough	Peak	Trough	Peak	at Trough	at Peak
7/49		5/49		-2	
	2/51		1/51		-1
3/53		5/52		-10	
	10/53		7/53		-3
10/54		3/54		-7	
	8/57		12/55		-20
3/59		4/58		-11	
	10/59		9/59		-1
6/61		2/61		-4	
	10/66		3/66		-7
5/67		5/67		0	
	2/70		9/69		-5
6/72		11/70		-19	
	9/74		3/74		-6
6/76		6/75		-12	
	3/80		4/79		-11
3/83		12/82		-3	
	2/84		6/84		+4
4/86		8/85		-8	
Average					
T, P				-8	-6
T & P				-7	
Standard Deviation					
T, P				6	6
T & P				6	
% Leads					
T, P				90	89
T & P				89	
% Matching Turns					
T, P				100	100
T & P				100	
Extra Cycles				none	

Note: The inflation turning points (col. 1) are based on the six-month smoothed rate of change in the Consumer Price Index, adjusted for seasonal variations.

RECESSION-RECOVERY SERIES AND CHARTS

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1B	N.A.P.M. Leading Index	12
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3	Coincident Employment Index (CIBCR)	13
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5	Coincident Index (BCD 920)(C,C,C)	14
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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover more than sixty indicators and give the information needed to compare the current expansion with two very long expansion since 1961. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business percentages of business cycle trough standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 64 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Actual Levels

		UNIT	Months After Business cycle Trough	Expansions Starting Feb. 1961	Expansions Starting Mar. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	64	-3.9	-10.0	-5.5	MAR
6A.	LONG LEADING INDEX, GROWTH RATE	%	63	-2.4	-12.5	5.8	FEB
6B.	N.A.P.M. INDEX, GROWTH RATE	%	64	5.9	-11.3	3.1	MAR
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	64	5.0	-5.6	3.8	MAR
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	64	9.7	-8.9	6.5	MAR
9.	LEADING INDEX, GROWTH RATE.	%	64	1.8	-5.5	2.9	MAR
10.	COINCIDENT INDEX, GROWTH RATE	%	64	9.6	-9.1	4.4	MAR
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	64	70.0	34.0	52.0	MAR
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	64	100.7	115.6	120.4	MAR
15.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	62	3.9	1.3	5.3	JAN
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	210	5.3	-2.4	3.4	Q1
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	64	57.6	59.2	62.3	MAR
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	63	85.9	30.5	76.5	FEB
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		64	35.9	90.9	75.4	MAR
30.	UNEMPLOYMENT RATE: TOTAL	%	64	3.7	7.7	5.5	MAR
31.	UNEMPLOYMENT RATE: INSURED	%	64	2.2	4.4	2.2	MAR
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	64	3.1	5.8	4.2	MAR
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	64	3.1	7.6	4.1	MAR
35.	PART-TIME EMPLOYMENT RATIO	%	64	4.1	3.0	2.8	MAR
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	62	14.3	17.0	15.3	JAN
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	63	53.6	-11.8	39.3	FEB
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	210	1.5	-1.1	1.0	Q1
45.	UNIT LABOR COSTS, GROWTH RATE	%	210	5.1	12.4	2.4	Q1
46.	HOURLY COMPENSATION, GROWTH RATE	%	210	6.8	11.1	3.4	Q1
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	210	3.3	-3.1	-0.2	Q1
48.	SELLING PRICE INDEX, GROWTH RATE	%	210	3.7	10.4	1.8	Q1
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	210	-1.4	-2.0	-0.6	Q1
50.	CORPORATE PROFIT MARGIN	%	200	13.7	4.4	6.1	Q4
51.	PRICE/LABOR COST RATIO	1977=100	210	101.1	95.8	99.2	Q1
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	64	3.3	12.1	3.8	MAR
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	64	-0.1	-5.6	1.6	MAR
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	64	4.7	13.0	9.2	Q1(MAR)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	64	75.0	86.0	71.0	Q1(MAR)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	63	10.4	6.4	6.7	FEB
61.	FEDERAL DEBT, GROWTH RATE	%	64	0.0	10.5	8.0	MAR
62.	TOTAL DEBT, GROWTH RATE	%	63	7.0	7.1	7.0	FEB
63.	MONEY SUPPLY (M1), GROWTH RATE	%	64	4.9	4.7	3.7	MAR
64.	MONEY SUPPLY (M2), GROWTH RATE	%	64	5.9	8.5	5.8	MAR
65.	TREASURY BILL RATE (3-MONTH)	%	64	4.5	8.1	5.7	MAR
66.	NEW CORPORATE BOND YIELD (AA)	%	64	5.7	11.5	9.7	MAR

TABLE 2

RECESSION-RECOVERY STATUS UP TO 64 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Percentage Change from Trough Levels

	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes					
1. BUSINESS WEEK LEADING INDEX (CIBCR)	64	27.4	20.8	42.6	MAR
1A. LONG LEADING INDEX (CIBCR)	63	50.0	10.3	60.2	FEB
1B. N.A.P.M. INDEX	64	40.9	25.2	28.2	MAR
2. LEADING EMPLOYMENT INDEX (CIBCR)	64	39.7	21.2	36.7	MAR
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)	64	42.4	33.3	44.5	MAR
4. LEADING INDEX (BCD)	64	38.7	24.2	38.4	MAR
5. COINCIDENT INDEX (BCD)	64	44.9	23.9	31.5	MAR
12. LAGGING INDEX (BCD)	64	26.2	3.6	20.1	MAR
14. EIGHT-COUNTRY LEADING INDEX (CIBCR)	62	9.3	26.6	34.8	JAN
II. Output, Income and Sales					
16. REAL GNP	210	31.4	19.5	23.5	Q1
18. INDUSTRIAL PRODUCTION INDEX	64	55.1	26.7	33.9	MAR
19. REAL PERSONAL INCOME	63	29.5	17.6	20.3	FEB
20. REAL CONSUMER EXPENDITURES	62	28.6	16.6	21.0	JAN
21. REAL RETAIL SALES	63	28.3	14.4	26.8	FEB
III. Employment and Unemployment					
22. TOTAL EMPLOYMENT	64	10.7	15.5	14.9	MAR
24. NONFARM EMPLOYMENT	64	19.7	17.2	17.9	MAR
25. NONFARM EMPLOYEE-HOURS	64	20.2	15.0	18.3	MAR
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES.	64	18.5	11.1	10.6	MAR
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	64	20.4	19.8	20.5	MAR
32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	64	-51.5	-3.7	-48.1	MAR
36. AVERAGE WORKWEEK, MANUFACTURING	64	5.3	1.8	4.9	MAR
37. OVERTIME HOURS, MANUFACTURING	64	85.7	4.2	60.9	MAR
IV. Investment Commitments and Inventories					
38. NEW PRIVATE HOUSING STARTS	64	-3.7	31.2	20.3	MAR
39. NEW PRIVATE HOUSING PERMITS	64	-5.7	53.7	15.3	MAR
40. CONTRACT & ORDERS, PLANT & EQUIPMENT	64	71.8	38.1	69.6	MAR
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING	200	145.4	66.1	65.2	Q4
V. Productivity, Wages, Costs, Prices and Profits					
52. LARGE BUSINESS FAILURES	64	-0.8	87.8	1.8	MAR
53. LEADING INDEX OF INFLATION (CIBCR)	64	15.3	7.6	18.9	MAR
54. CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	64	8.7	56.5	31.5	MAR
56. INDUSTRIAL MATERIALS PRICE INDEX	64	8.1	43.6	12.2	MAR
VI. Money, Credit, Interest Rates and Stock Prices					
67. STOCK PRICE INDEX (S&P 500)	64	38.8	44.6	94.4	MAR

TABLE 3

RECESSION-RECOVERY STATUS UP TO 64 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Differences from Trough Levels

		Unit	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	64	-10.4	-4.7	-10.0	MAR
6A.	LONG LEADING INDEX, GROWTH RATE	%	63	-7.2	-12.4	-10.9	FEB
6B.	N.A.P.M. INDEX, GROWTH RATE	%	64	6.0	5.8	6.3	MAR
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	64	7.2	4.3	2.9	MAR
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	64	17.7	7.8	14.4	MAR
9.	LEADING INDEX, GROWTH RATE.	%	64	0.5	8.0	-1.7	FEB
10.	COINCIDENT INDEX, GROWTH RATE	%	64	16.4	6.0	11.2	MAR
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	64	33.3	16.3	5.3	MAR
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	64	12.9	19.0	10.4	MAR
15.	EIGHT-COUNTRY LEADING INDEX, GROWTH RATE	%	62	0.2	13.2	5.6	JAN
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	210	4.7	2.6	4.5	Q1
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	64	1.3	2.7	4.6	MAR
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	63	65.6	16.4	55.1	FEB
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN LABOR FORCE		64	-55.7	-10.4	-108.7	MAR
30.	UNEMPLOYMENT RATE: TOTAL	%	64	-2.9	-0.6	-5.0	MAR
31.	UNEMPLOYMENT RATE: INSURED	%	64	-4.1	-1.9	-2.8	MAR
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	64	-1.6	-0.2	-2.3	MAR
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	64	-3.4	-0.9	-4.9	MAR
35.	PART-TIME EMPLOYMENT RATIO	%	64	2.4	0.2	0.8	MAR
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	62	-12.3	-2.7	-17.7	JAN
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	63	78.6	46.4	80.4	FEB
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	210	-0.3	-0.6	-0.1	Q1
45.	UNIT LABOR COSTS, GROWTH RATE	%	210	3.8	1.0	-2.9	Q1
46.	HOURLY COMPENSATION, GROWTH RATE	%	210	3.6	0.0	-3.1	Q1
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	210	1.5	-3.3	-2.5	Q1
48.	SELLING PRICE INDEX, GROWTH RATE	%	210	4.0	-2.8	-2.5	Q1
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	210	0.2	-3.8	0.4	Q1
50.	CORPORATE PROFIT MARGIN	%	200	4.5	-1.3	2.2	Q4
51.	PRICE/LABOR COST RATIO	1977=100	210	4.5	-1.3	3.8	Q1
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	64	2.1	2.4	-0.3	MAR
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	64	4.6	7.5	8.6	MAR
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	64	6.5	-2.6	10.9	Q1(MAR)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	64	20.0	10.3	3.3	Q1(MAR)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	63	2.9	0.5	6.9	FEB
61.	FEDERAL DEBT, GROWTH RATE	%	64	0.5	-0.8	-11.5	MAR
62.	TOTAL DEBT, GROWTH RATE	%	63	3.2	0.0	2.2	FEB
63.	MONEY SUPPLY (M1), GROWTH RATE	%	64	3.3	-0.3	-6.2	MAR
64.	MONEY SUPPLY (M2), GROWTH RATE	%	64	-0.6	1.0	-4.0	MAR
65.	TREASURY BILL RATE (3-MONTH)	%	64	2.2	2.5	-2.2	MAR
66.	NEW CORPORATE BOND YIELD (AA)	%	64	1.2	2.1	-2.5	MAR

HOW TO READ CHARTS

ACTUAL LEVEL CHARTS

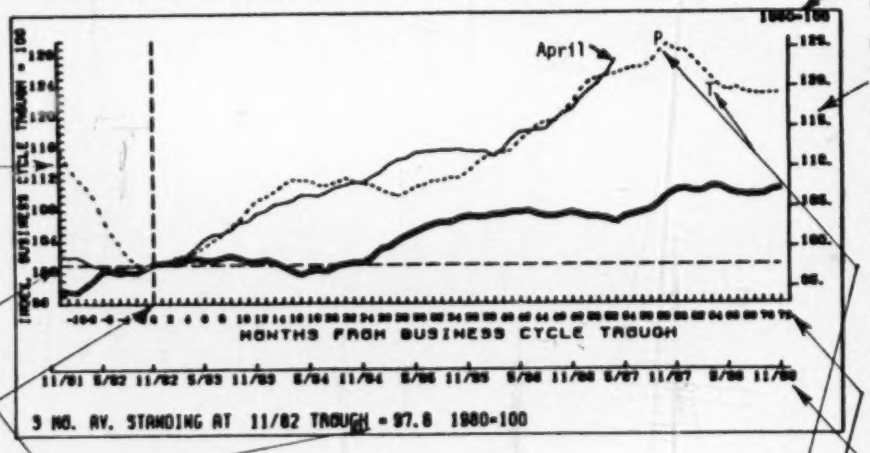
TITLE: If the title does not say "growth rate," then the chart is for the actual level, rather than the growth rate.

LEFT-HAND SCALE measures movements of both current and past expansions, relative to their standing at the respective reference troughs (i.e. for each expansion the standing at the trough equals 100). This is the common vertical scale along which the expansions are compared.

HORIZONTAL DOTTED LINE shows level at reference trough (100) for current and past expansions.

VERTICAL DOTTED LINE represents reference trough dates for current and past expansions, which are all aligned so that the reference trough dates are positioned on the vertical line.

STANDING AT THE TROUGH for the current expansion (when the expansion began) is typically calculated as the 3-month average centered on the trough month.

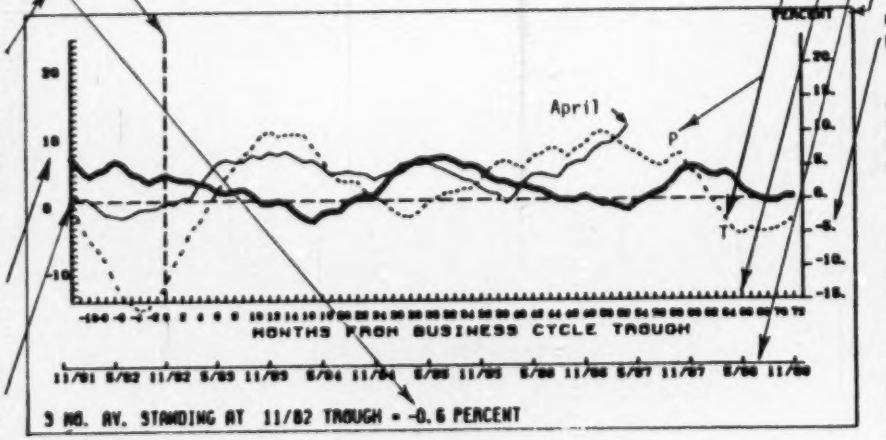


GROWTH RATE CHARTS

TITLE: If the title says "growth rate," then the chart is for the "6-month smoothed growth rate," rather than the actual level. These growth rates are obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

LEFT-HAND SCALE, (same as the right-hand scale) shows growth rates in percent for both current and past expansions.

HORIZONTAL DOTTED LINE is drawn typically at 0% growth rate, a natural reference level for both current and past expansions.



UNIT for right-hand scale, which refers only to the current expansion.

RIGHT-HAND SCALE refers only to current expansion. It is a transformation of the left hand scale to show the current expansion in original units rather than with trough standing = 100.

P indicates the January 1980 PEAK, marking the start of the 1980 recession, which lasted till the July 1980 TROUGH, indicated by T.

HORIZONTAL SCALE measures months from business cycle trough for both the current and the past expansions. This is the common time scale along which the recoveries are compared.

ACTUAL DATES, referring only to the current expansion.

UNIT for both scales (percent), referring to both current and past growth rates in expansions.

RIGHT-HAND SCALE, which refers to both current and past expansions.

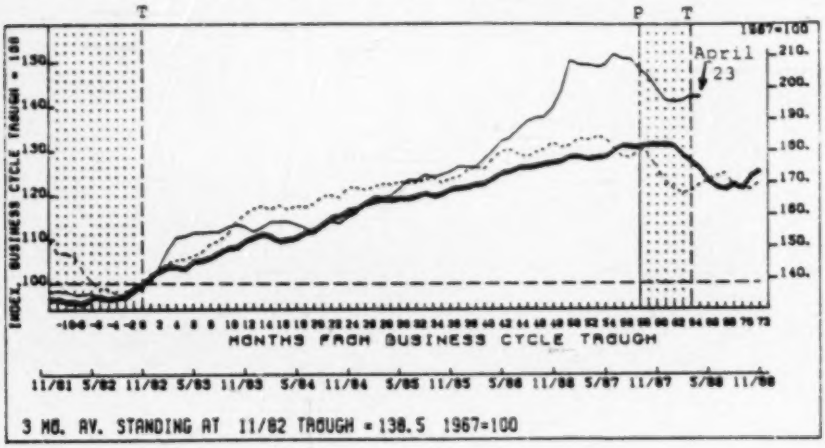
——— THICK LINE indicates 1961-69 expansion (from February 1961) which continued for 106 months.

---------- DOTTED LINE indicates the 1975-80 expansion (from Mar. 1975), which ended after 58 months, and the subsequent recession (from January 1980 to July 1980).

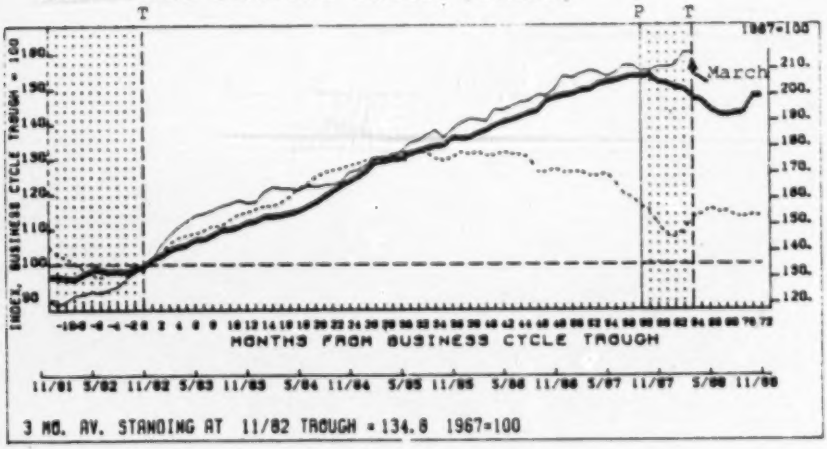
——— THIN LINE indicates the current expansion (business cycle trough: November 1982 or IV Q 1982).

COMPOSITE INDEXES

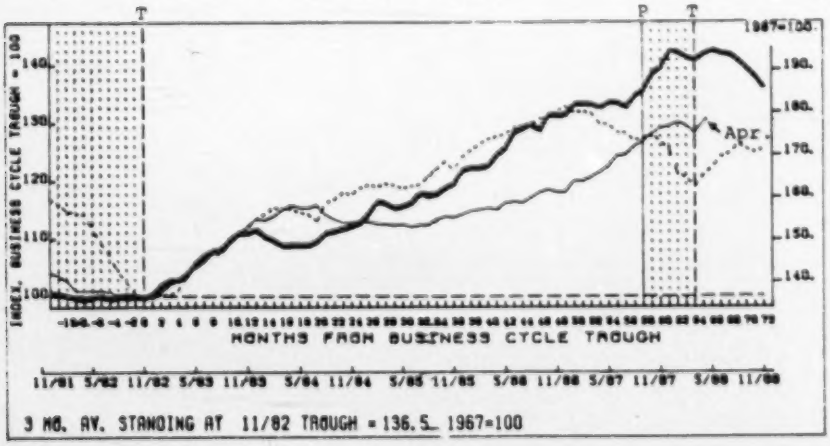
1. BUSINESS WEEK LEADING INDEX (CIBCR)



1A. LONG-LEADING INDEX (CIBCR)

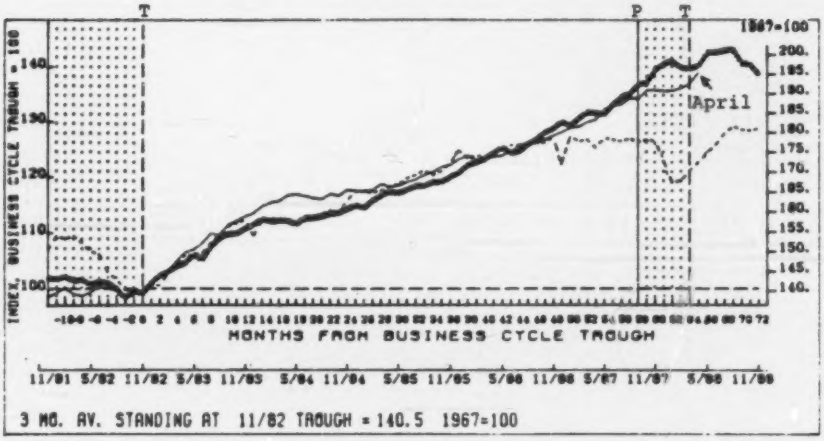


1B. N.A.P.M. LEADING INDEX

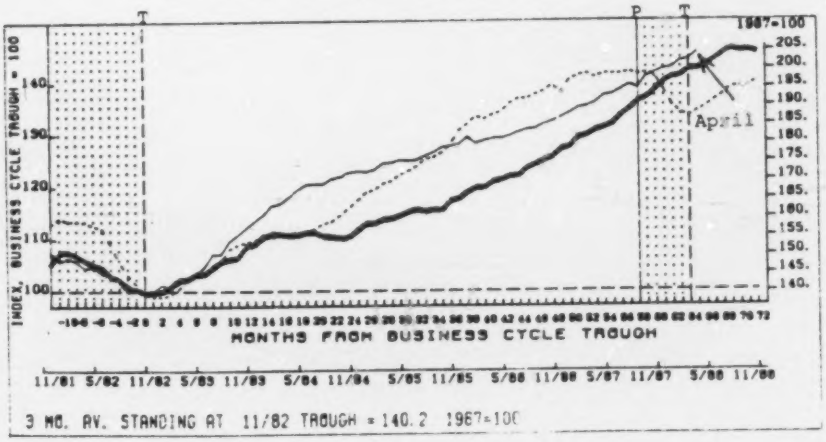


All the composite indexes for the U.S. (see charts 1-13) seem to be telling a consistent story: The leaders, which had generally appeared to forecast a slowdown (like 1966-67), are now recovering; and the anticipated slowdown is not yet reflected in any of the coincident indexes.

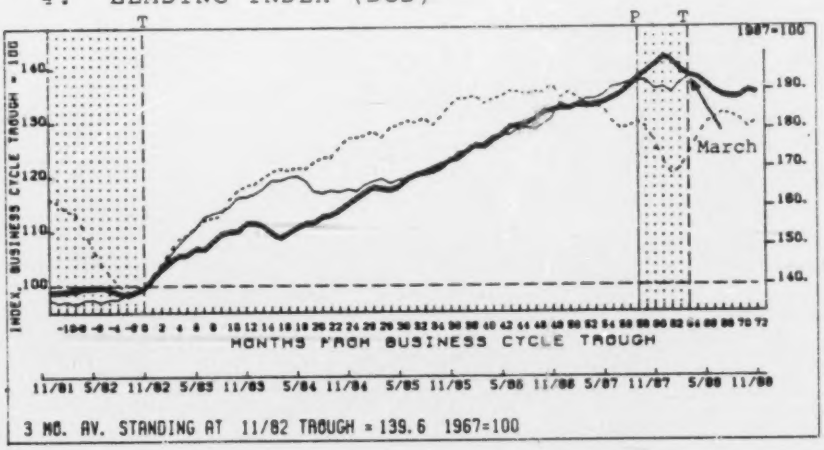
2. LEADING EMPLOYMENT INDEX (CIBCR)


T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.5 1967=100

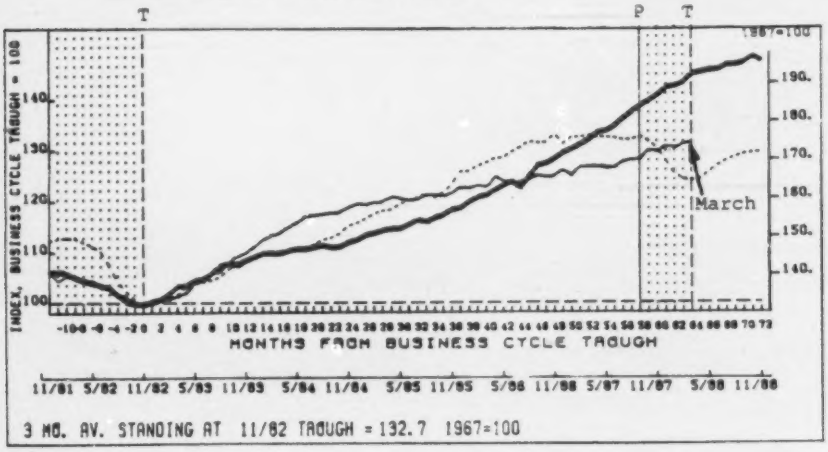
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)


T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.2 1967=100

4. LEADING INDEX (BCD)

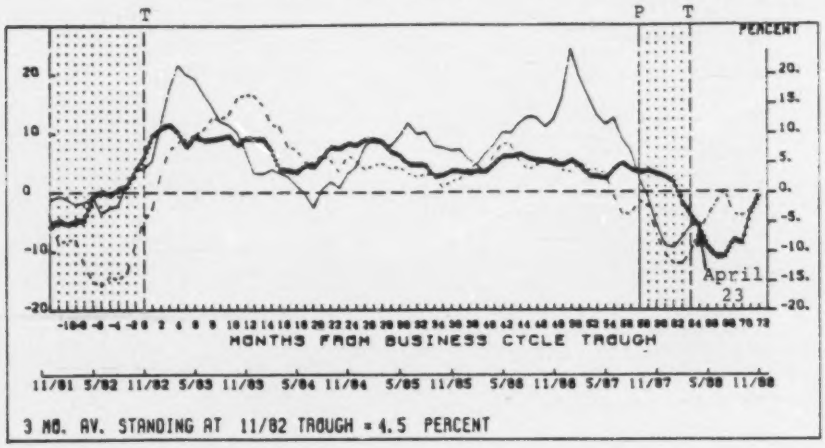

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 139.6 1967=100

5. COINCIDENT INDEX (BCD)

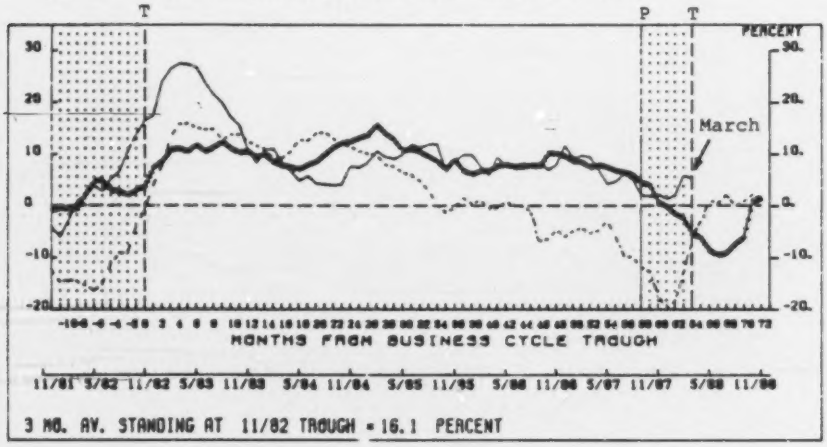


COMPOSITE INDEX GROWTH RATES

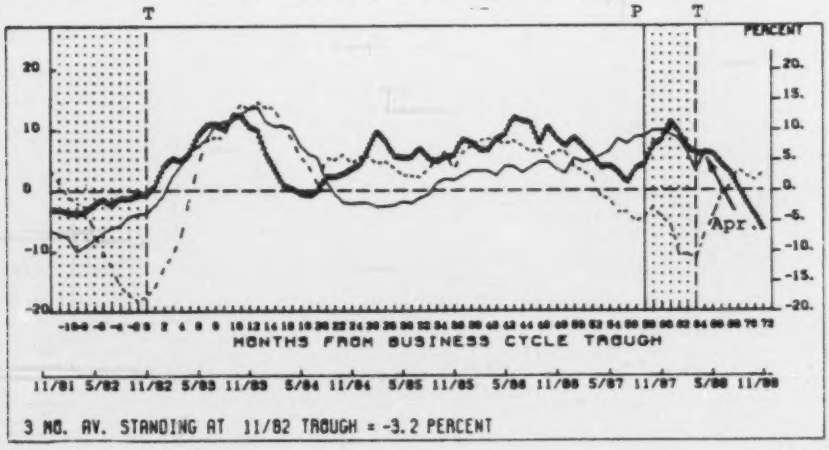
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
April
23
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.5 PERCENT

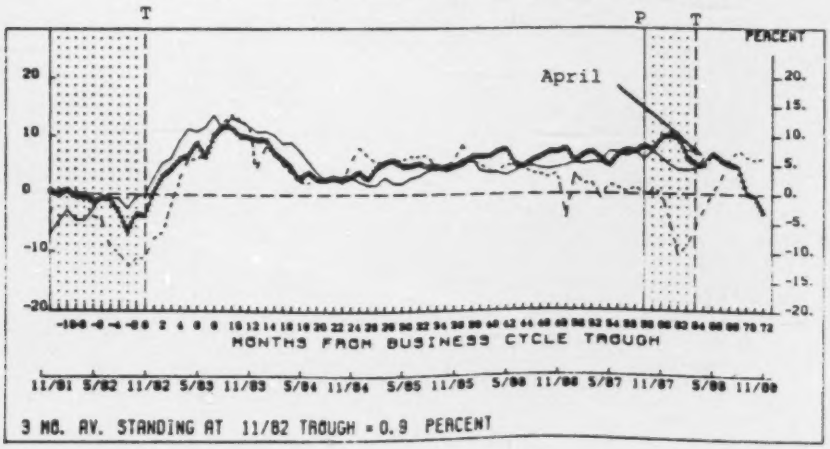
6A. LONG-LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 16.1 PERCENT

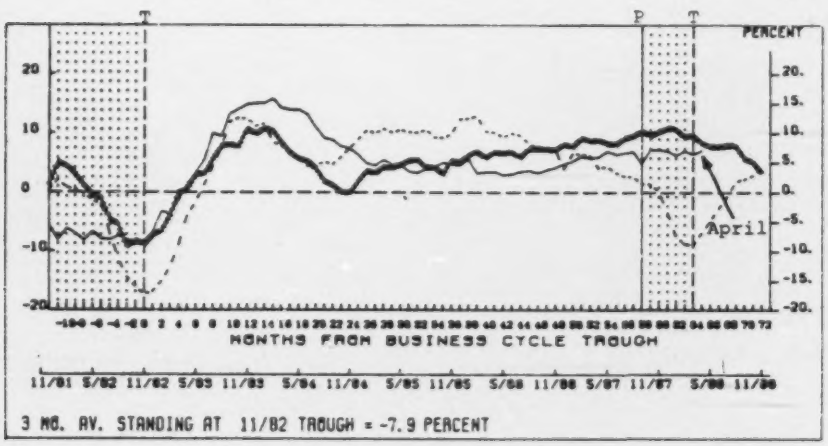
6B. N.A.P.M. LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
Apr.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -3.2 PERCENT

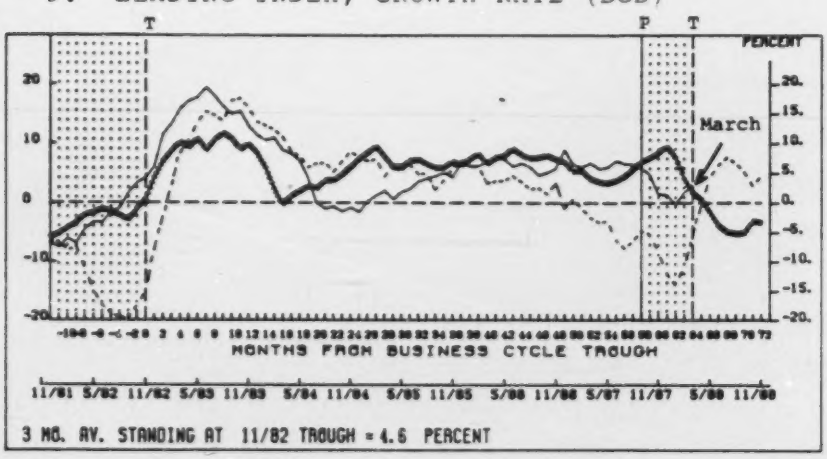
7. LEADING EMPLOYMENT INDEX, GROWTH RATE



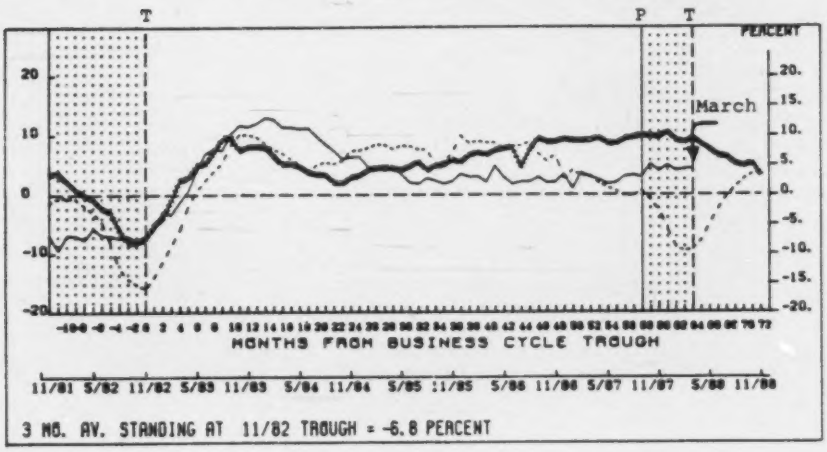
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE (CIBCR)



9. LEADING INDEX, GROWTH RATE (BCD)

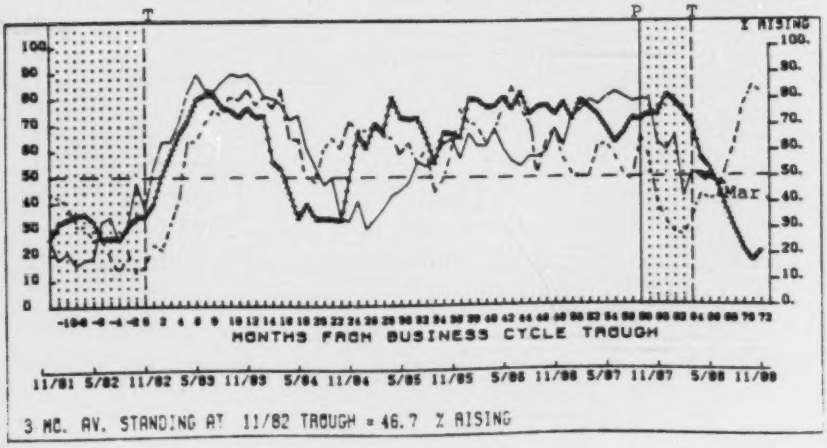


10. COINCIDENT INDEX, GROWTH RATE (BCD)

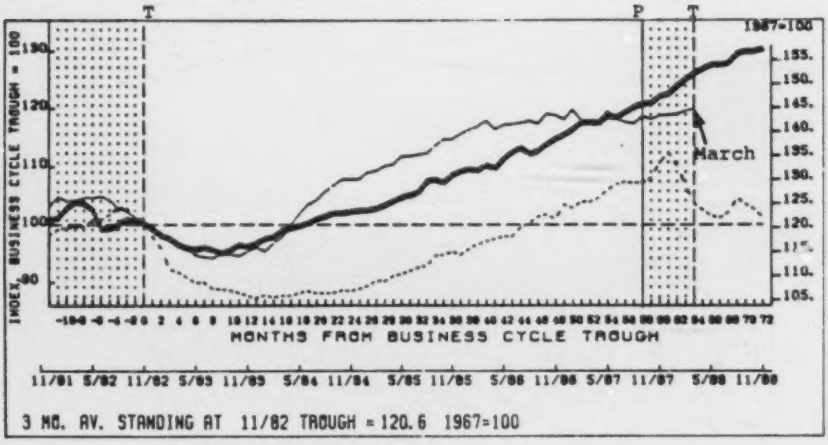


OTHER COMPOSITE INDEXES

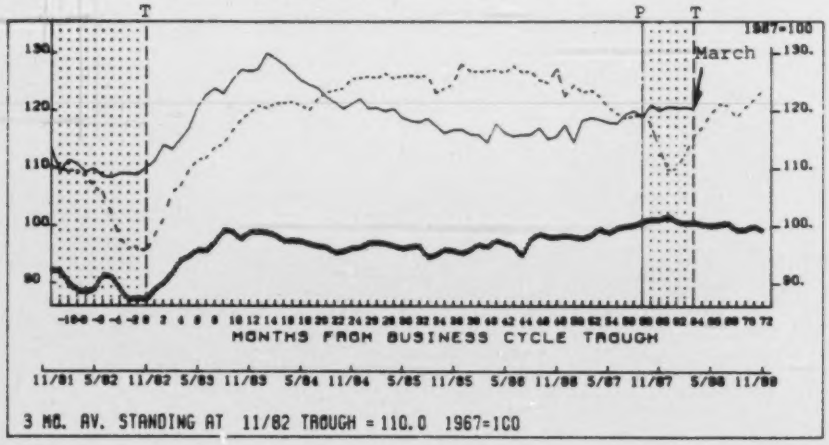
11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)


T
P
T
% RISING
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 46.7 % RISING

12. LAGGING INDEX (BCD)

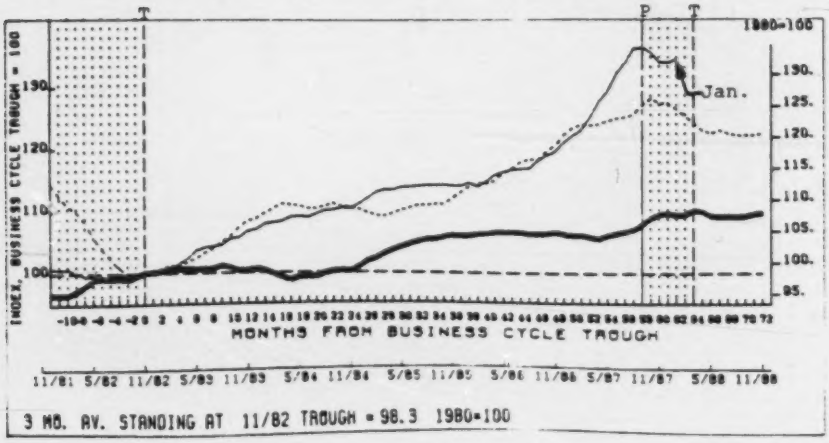

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 120.6 1967=100

13. RATIO, COINCIDENT TO LAGGING INDEX

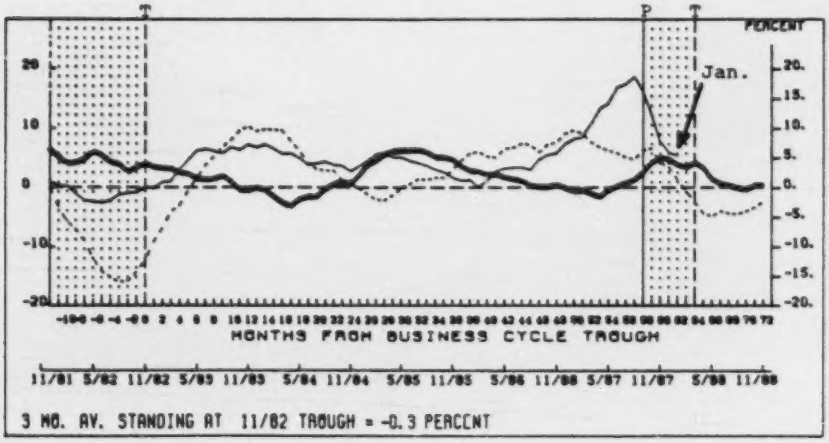


OTHER COMPOSITE INDEXES

14. NINE-COUNTRY LEADING INDEX (CIBCR)*


T
P
T
1980=100
INDEX, BUSINESS CYCLE TROUGH = 100
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 98.3 1980=100

15. NINE-COUNTRY LEADING INDEX, GROWTH RATE

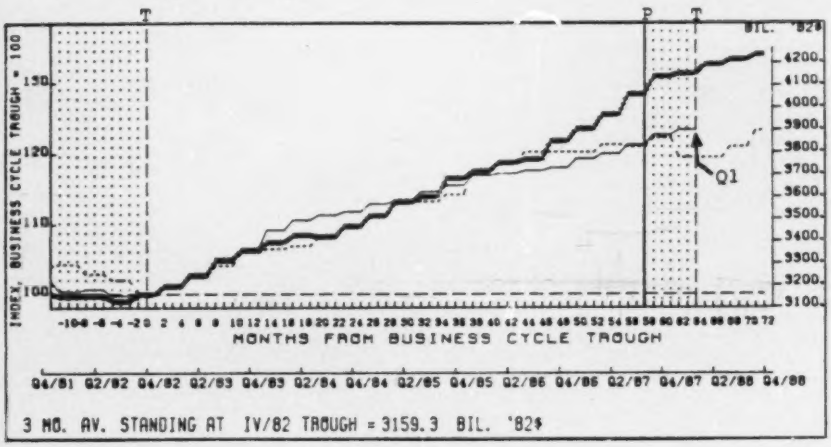

T
P
T
PERCENT
Jan.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -0.3 PERCENT

U.S. Exports Watch Out: Slowdown Ahead!

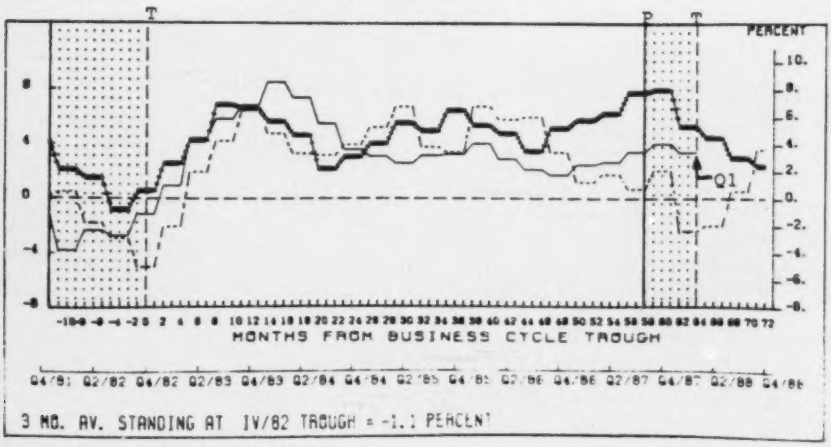
*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia, Taiwan, R.O.C. and Korea, R.O.K.

OUTPUT, INCOME AND SALES

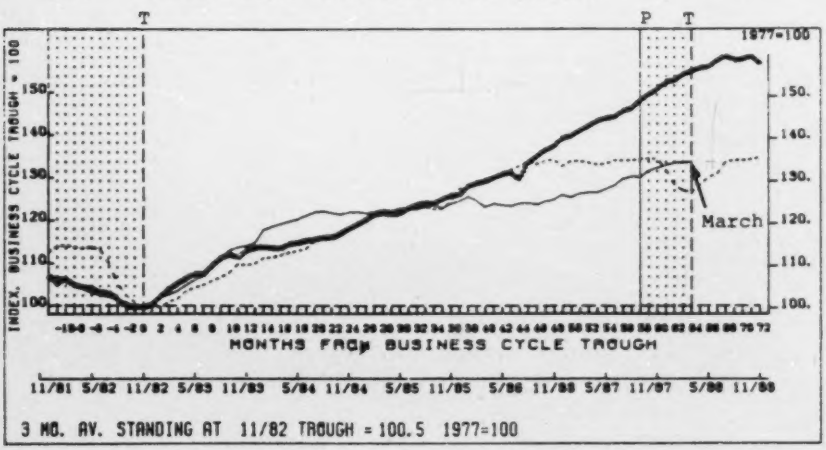
16. REAL GNP


T
P
T
BIL. '82$
INDEX, BUSINESS CYCLE TROUGH = 100
Q1
MONTHS FROM BUSINESS CYCLE TROUGH
Q4/81 Q2/82 Q4/82 Q2/83 Q4/83 Q2/84 Q4/84 Q2/85 Q4/85 Q2/86 Q4/86 Q2/87 Q4/87 Q2/88 Q4/88
3 MO. AV. STANDING AT IV/82 TROUGH = 3159.3 BIL. '82$

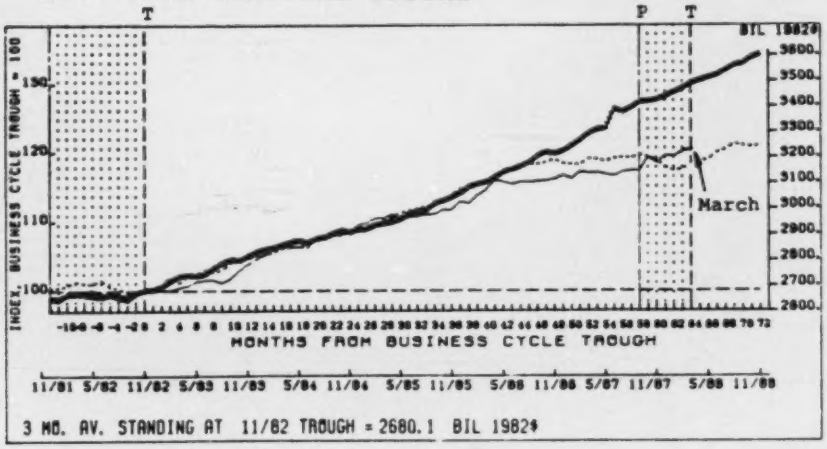
17. REAL GNP, GROWTH RATE



18. INDUSTRIAL PRODUCTION INDEX


T
P
T
1977=100
INDEX, BUSINESS CYCLE TROUGH = 100
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 100.5 1977=100

19. REAL PERSONAL INCOME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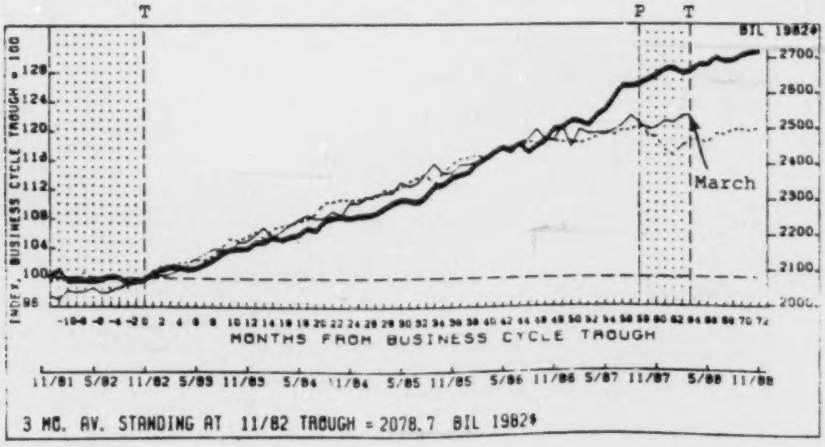
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2680.1 BIL 1982$

20. REAL CONSUMER EXPENDITURES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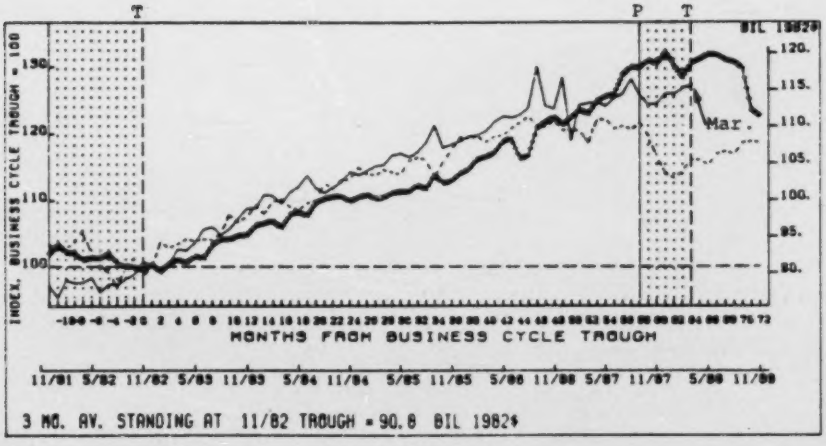
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2078.7 BIL 1982$

Consumer spending is holding up.

21. REAL RETAIL SALES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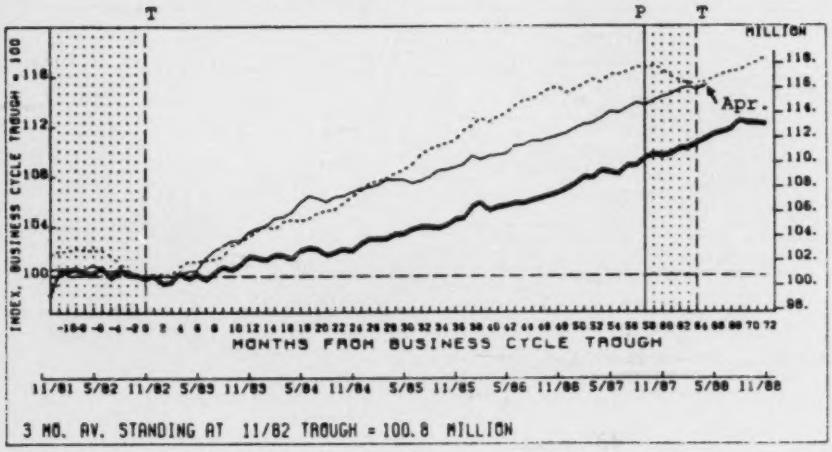
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
Mar.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 90.8 BIL 1982$

22. TOTAL EMPLOYMENT


T
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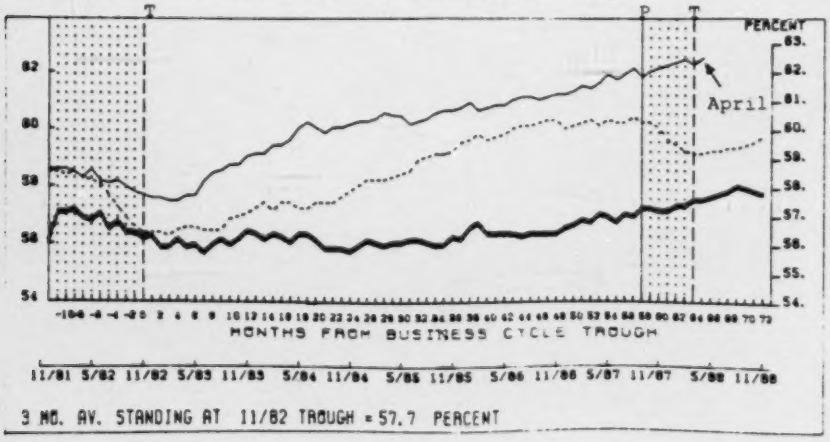
MILLION
Apr.
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 100.8 MILLION

23. EMPLOYMENT TO POPULATION RATIO


T
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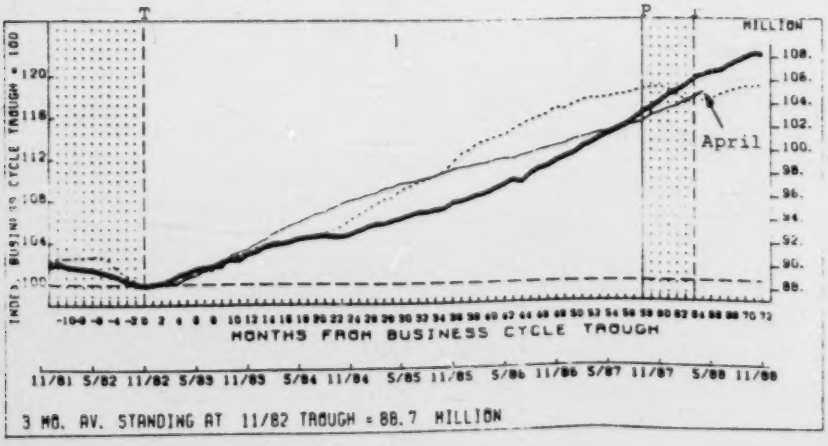
PERCENT
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 57.7 PERCENT

The percentage with jobs has never been higher.

24. NONFARM EMPLOYMENT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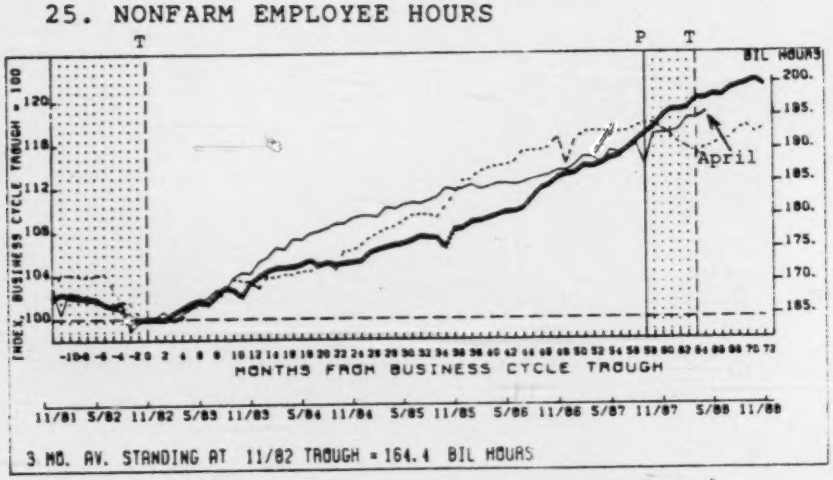
MILLION
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 88.7 MILLION

25. NONFARM EMPLOYEE HOURS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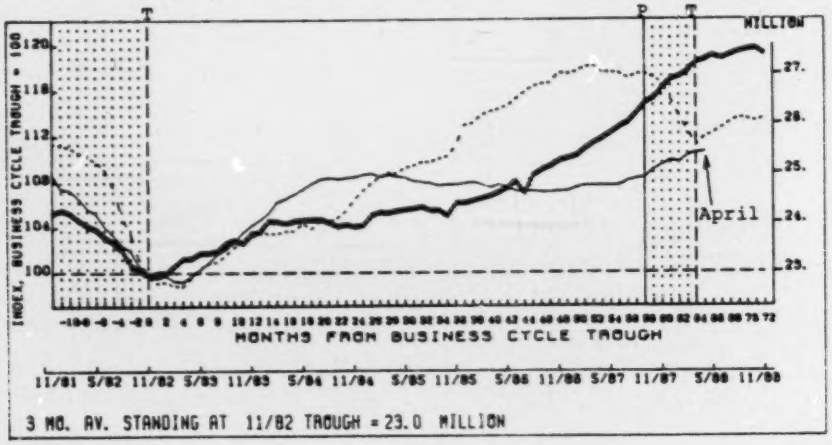
BIL HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 164.4 BIL HOURS

One of the best measures of economic activity is doing well.

26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES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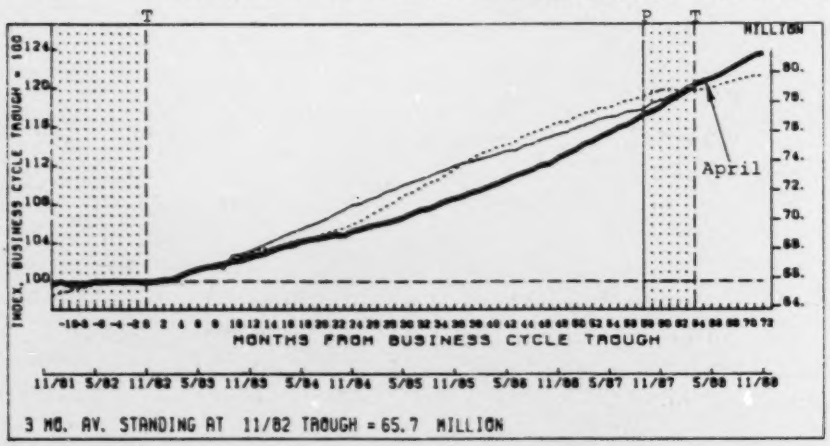
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 23.0 MILLION

Goods-producing employment is picking up after a slowdown.

27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES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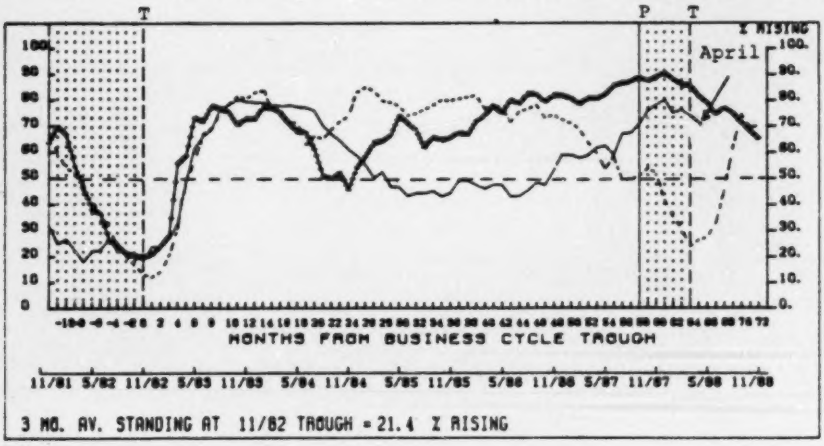
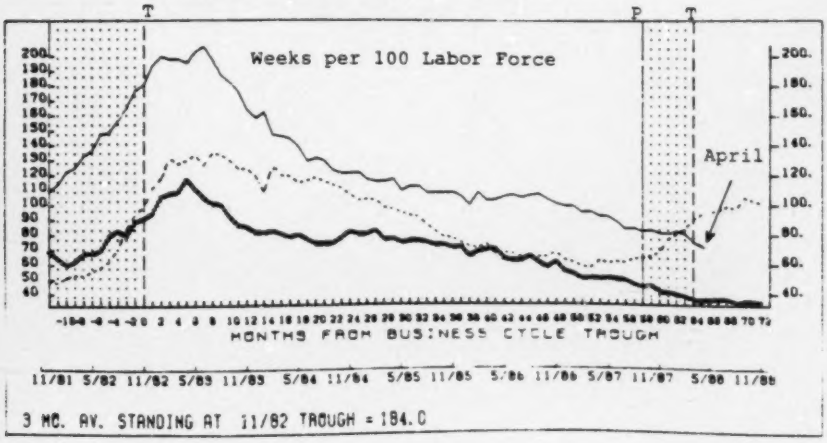
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 65.7 MILLION

Services jobs are right on target.

28. EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES

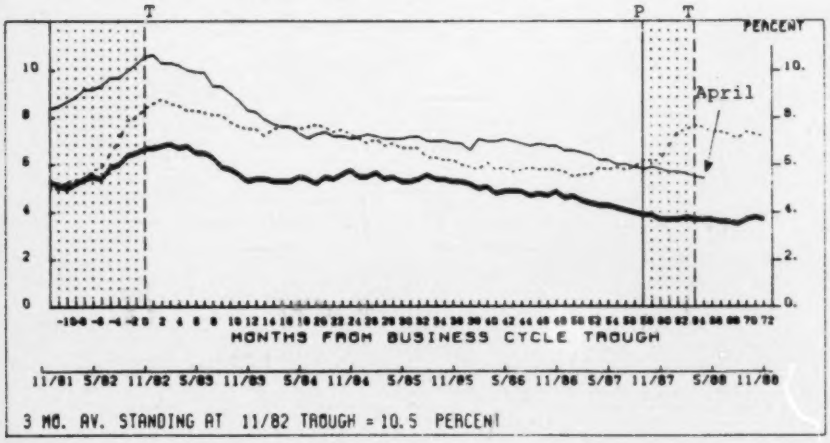


29. UNEMPLOYMENT SEVERITY INDEX

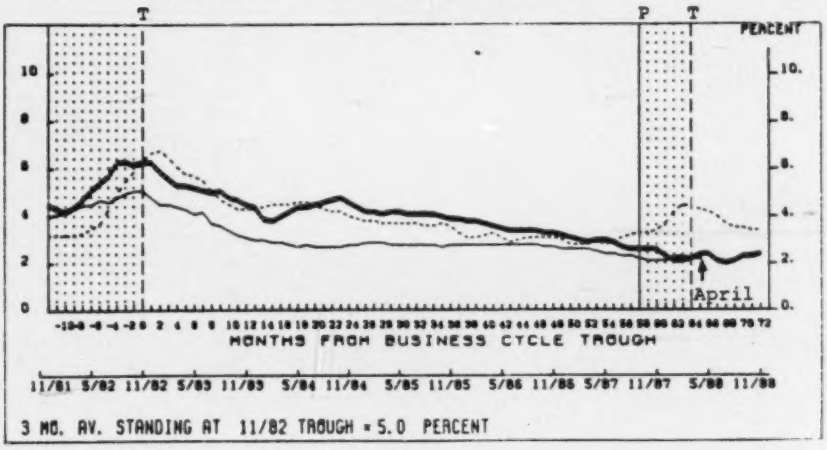


Declines in both the unemployment rate and the average spell of unemployment have pushed this index down.

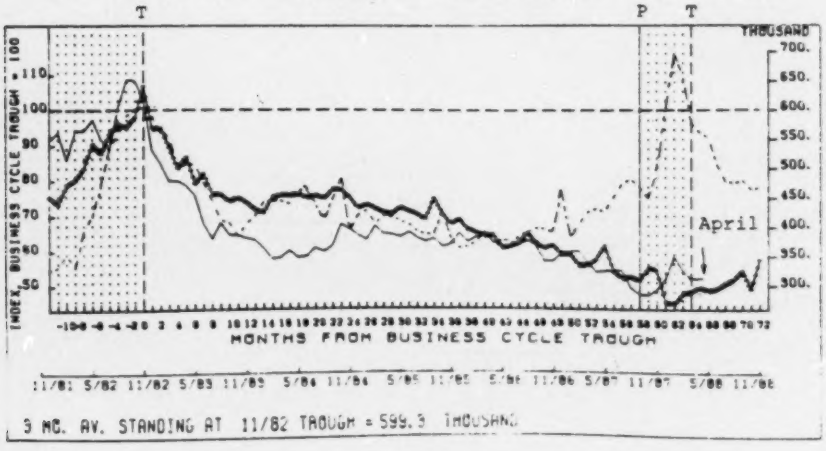
30. UNEMPLOYMENT RATE: TOTAL



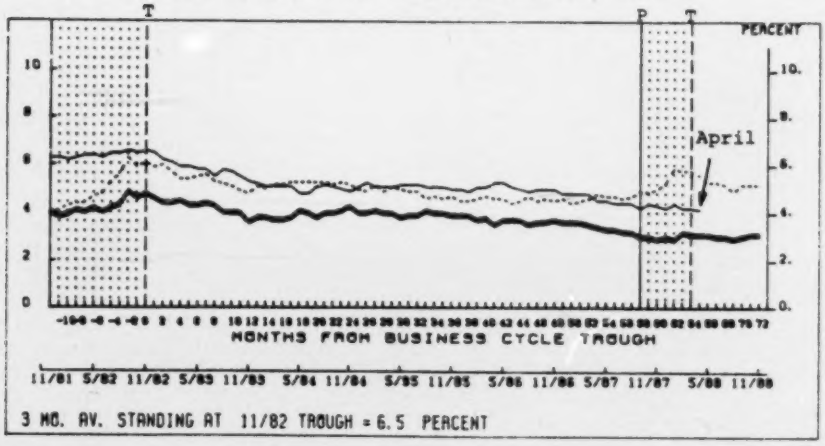
31. UNEMPLOYMENT RATE: INSURED



32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE

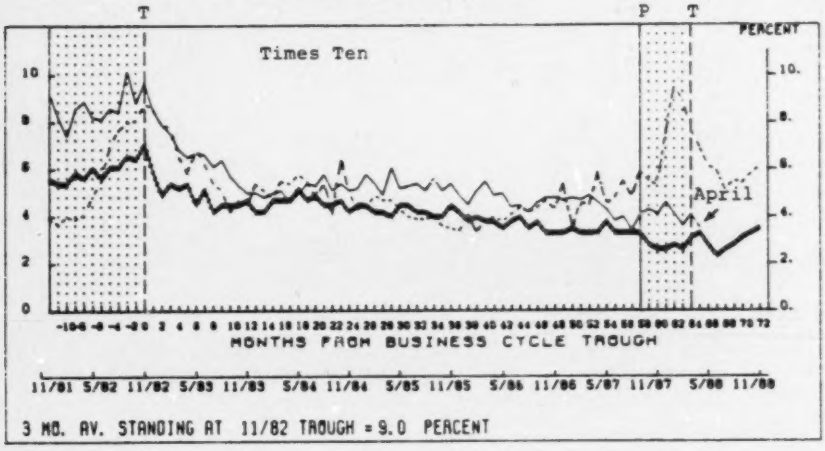


33. SHORT-DURATION UNEMPLOYMENT RATE



OTHER LEADING EMPLOYMENT INDICATORS

34. LAYOFF RATE UNDER 5 WEEKS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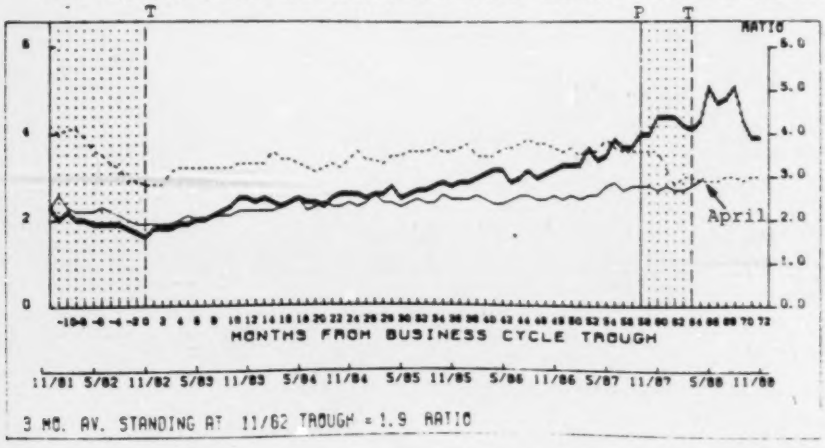
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.0 PERCENT

35. VOLUNTARY TO INVOLUNTARY PART-TIME EMPLOYMENT RATIO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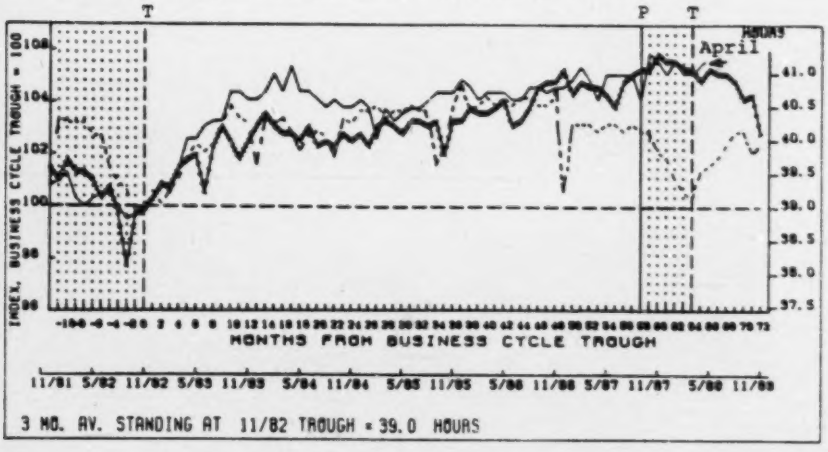
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1.9 RATIO

36. AVERAGE WORKWEEK, MANUFACTURING


T
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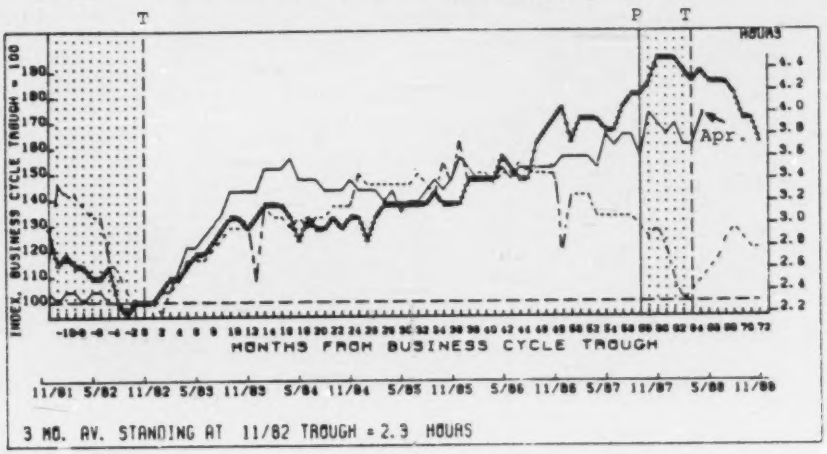
HOURS
April
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 39.0 HOURS

The Workweek is close to the ceiling.

OTHER LEADING EMPLOYMENT INDICATORS, continued

37. OVERTIME HOURS, MANUFACTURING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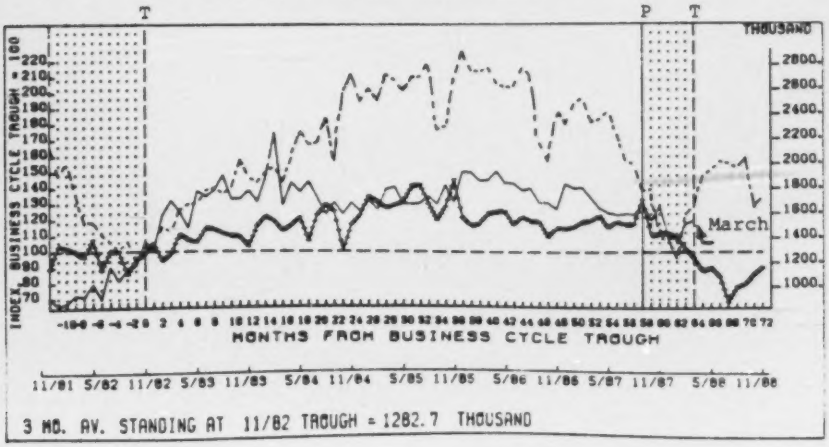
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
Apr.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2.3 HOURS

38. NEW PRIVATE HOUSING STARTS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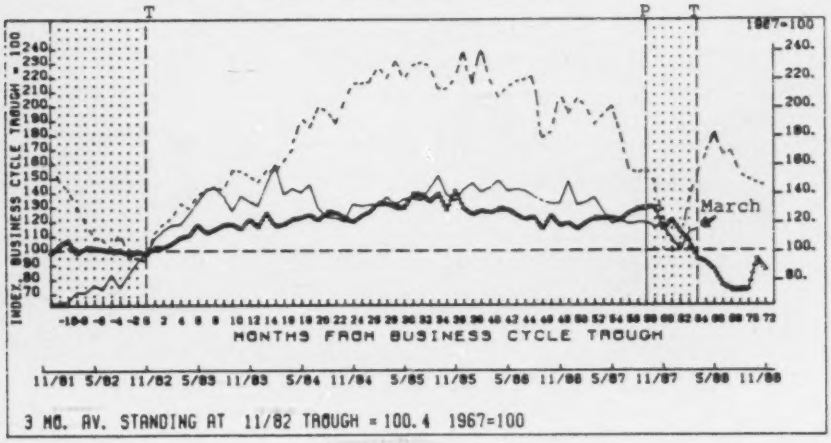
THOUSAND
March
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1282.7 THOUSAND

39. NEW PRIVATE HOUSING PERMITS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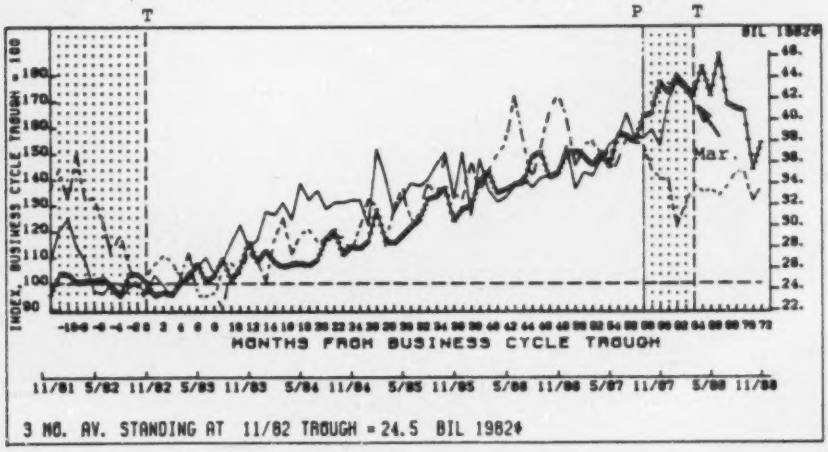
1967=100
March
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 100.4 1967=100

40. CONTRACTS & ORDERS, PLANT & EQUIPMENT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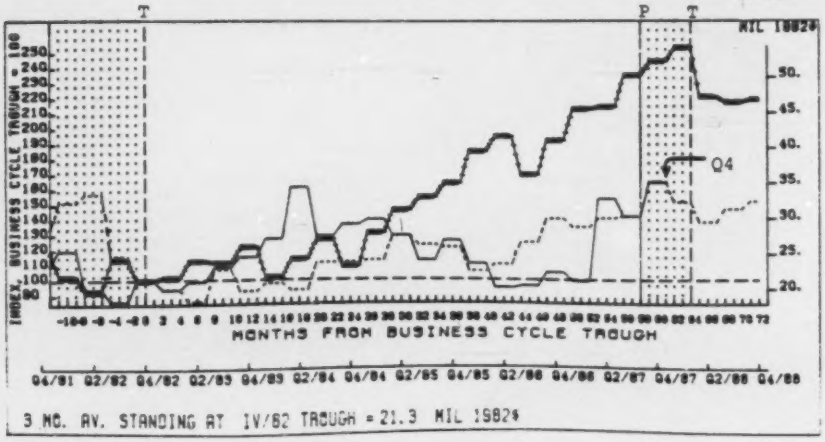
BIL 1982$
Mar.
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 24.5 BIL 1982$

The slowdown is here . . .

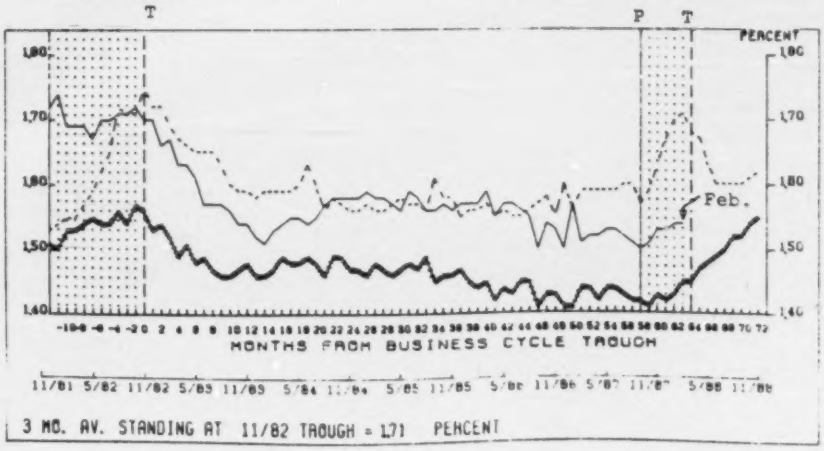
. . . and here . . .
. . . that is, in residential housing . . .

. . . but not here, in industrial contracts

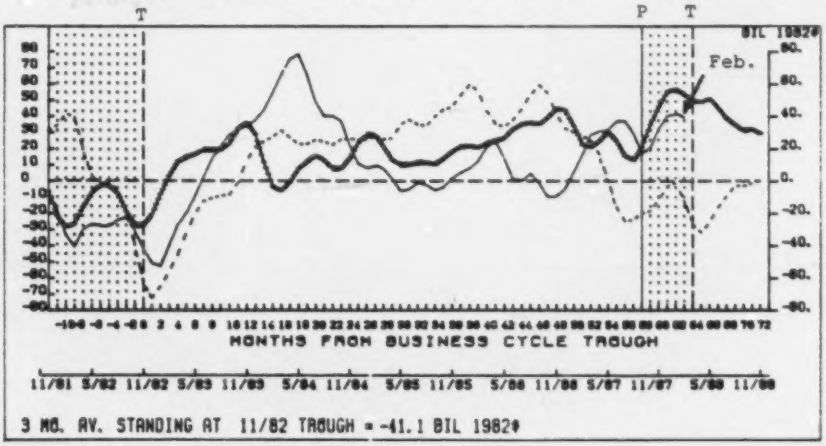
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING



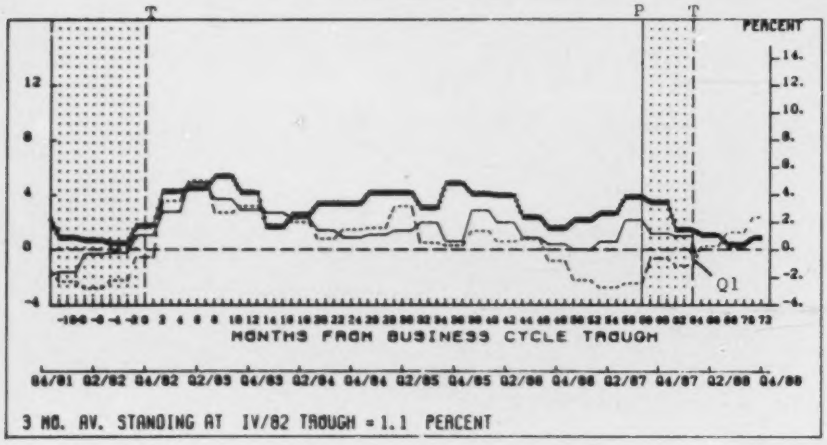
42. INVENTORY/SALES RATIO, MANUFACTURING AND TRADE



43. CHANGE IN INVENTORY ON HAND & ON ORDER

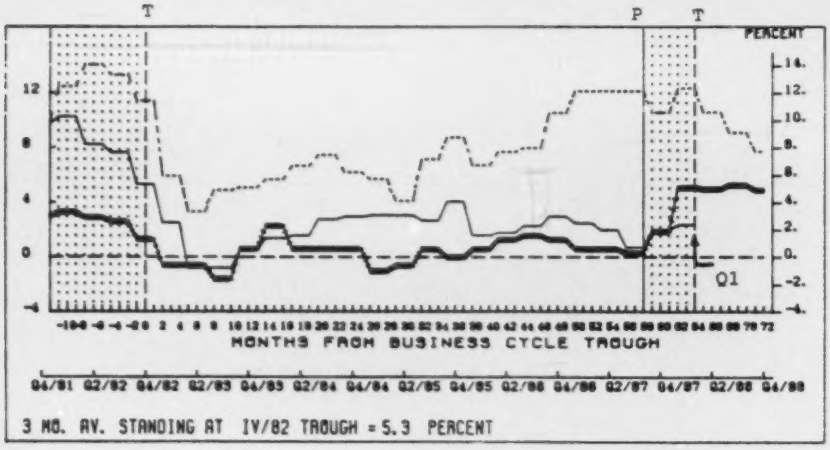


44. OUTPUT PER HOUR, GROWTH RATE



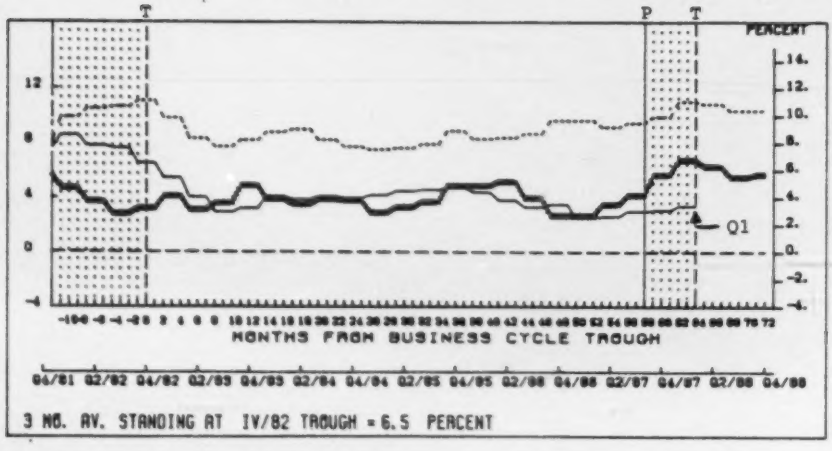
Productivity growth is tepid.

45. UNIT LABOR COSTS, GROWTH RATE



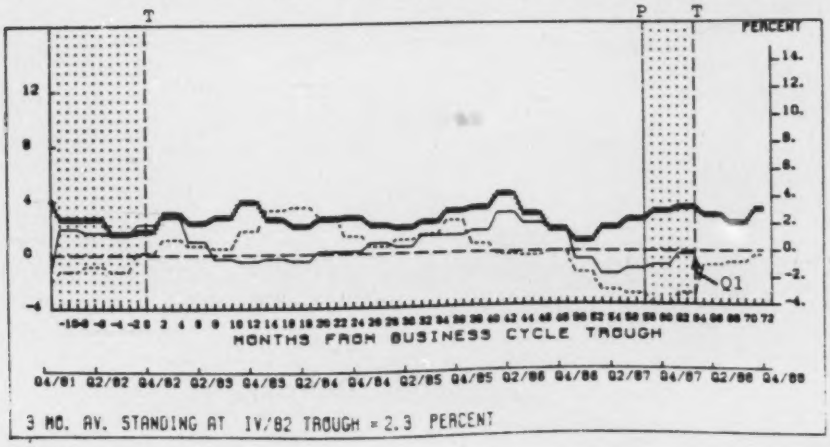
Labor cost gains are still under 3%.

46. HOURLY COMPENSATION, GROWTH RATE



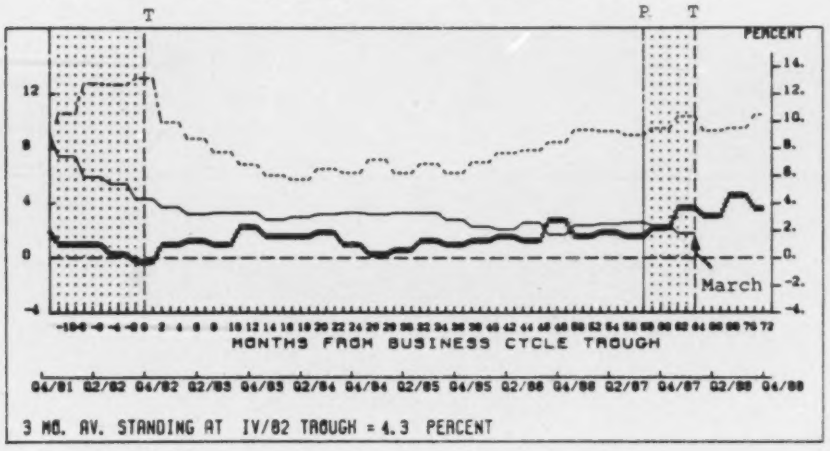
Wages are rising a bit faster than productivity . . .

47. REAL HOURLY COMPENSATION, GROWTH RATE

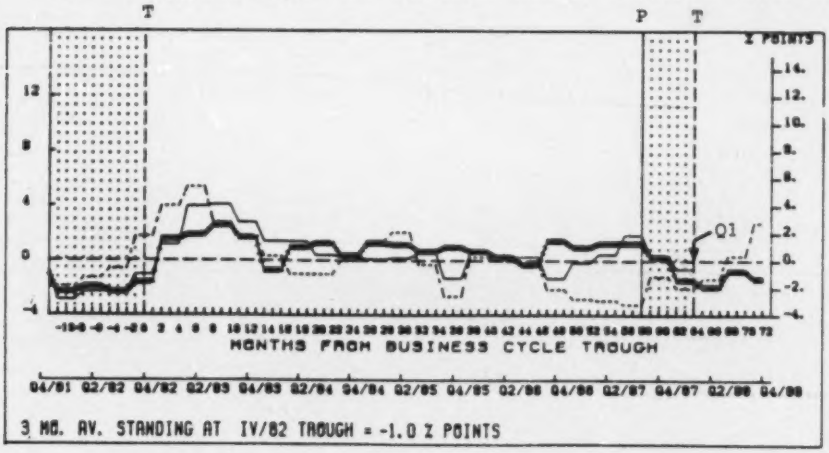


. . . but not quite as fast as consumer prices

48. SELLING PRICE INDEX, GROWTH RATE

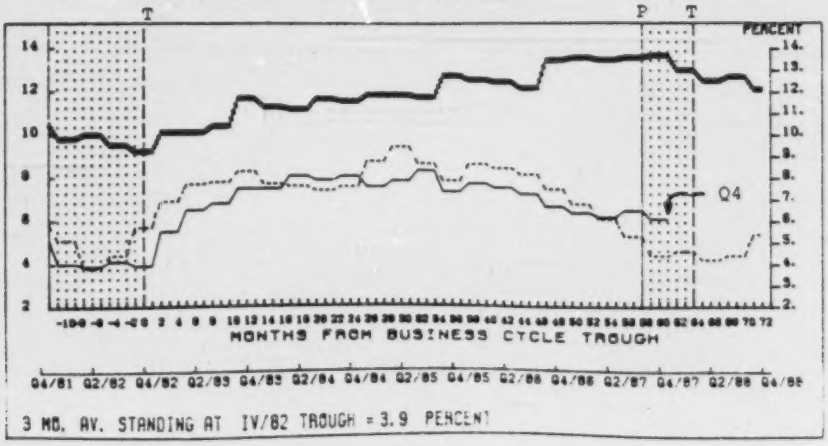


49. GROWTH RATE IN PRICES MINUS GROWTH RATE IN COSTS

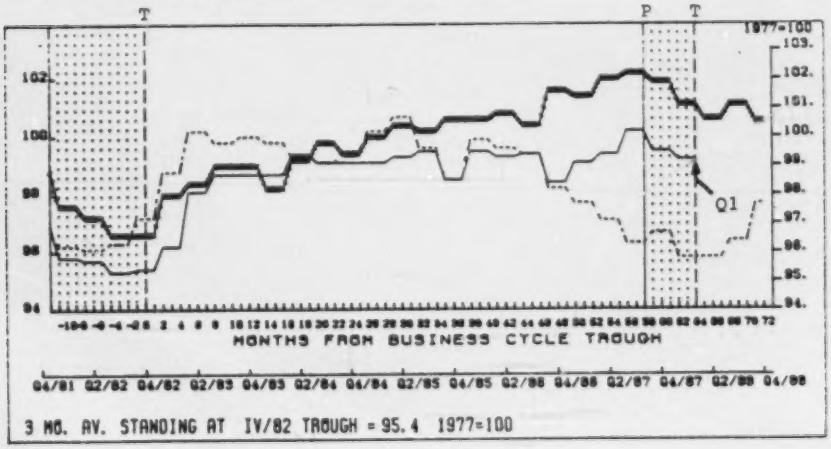


Note that before the 1980 recession, as in most others, costs rose much faster than prices.

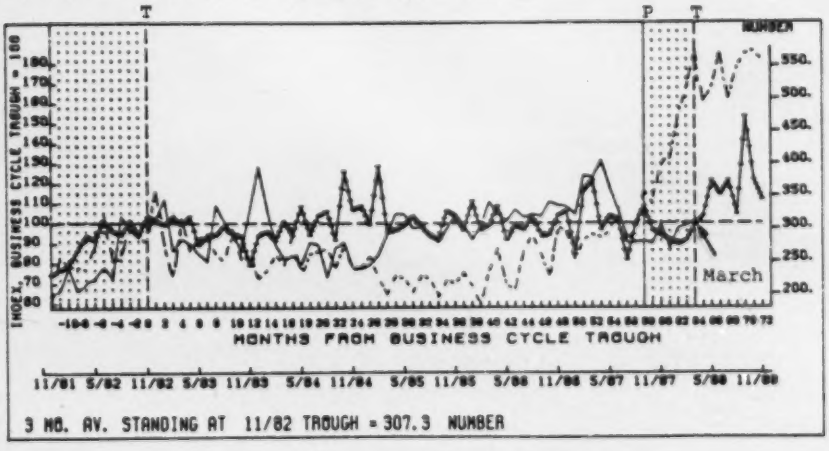
50. CORPORATE PROFIT MARGIN



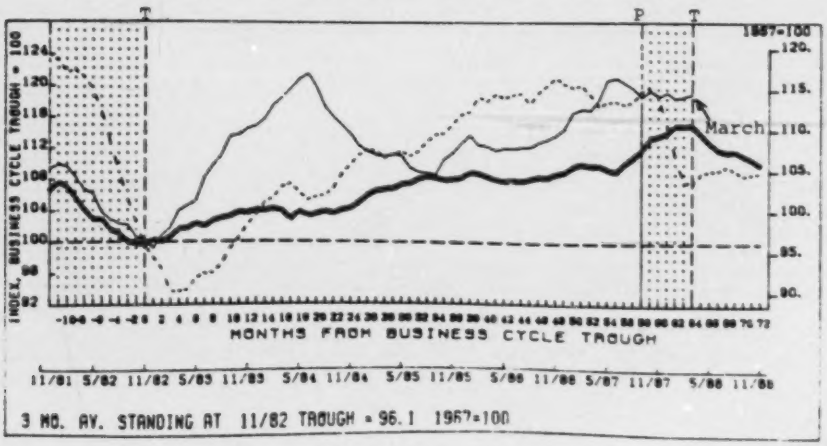
51. PRICE/LABOR COST RATIO



52. LARGE BUSINESS FAILURES



53. LEADING INDEX OF INFLATION (CIBCR)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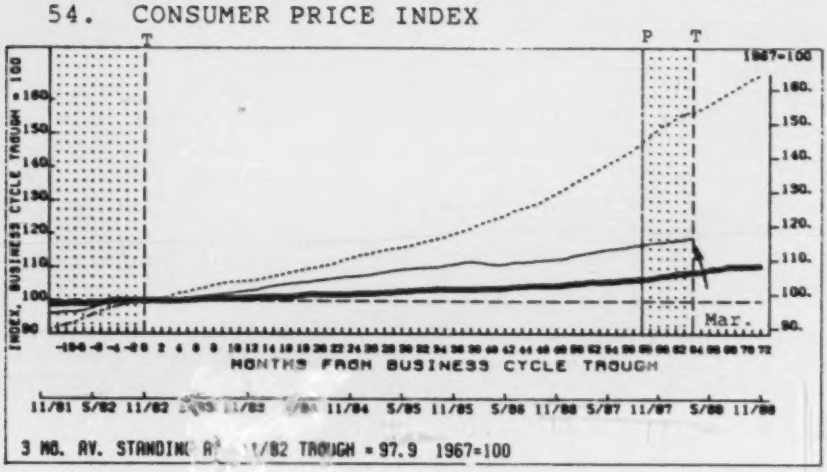
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
March
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 96.1 1967=100

Inflation is simmering, not boiling.

54. CONSUMER PRICE INDEX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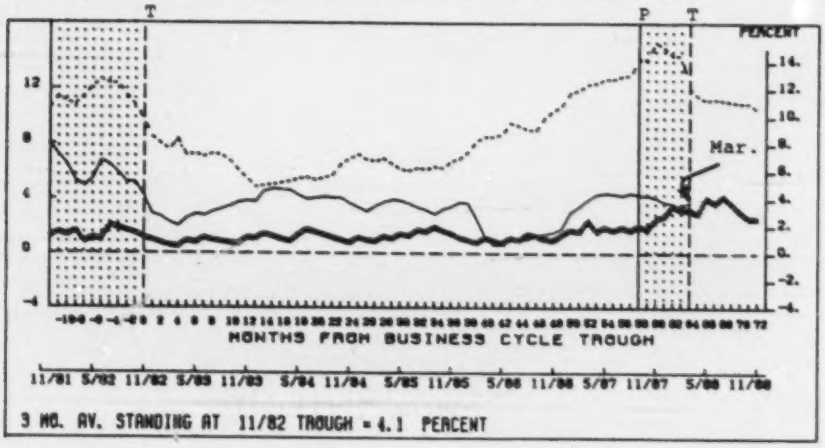
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
Mar.
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 97.9 1967=100

55. CONSUMER PRICE INDEX, GROWTH RATE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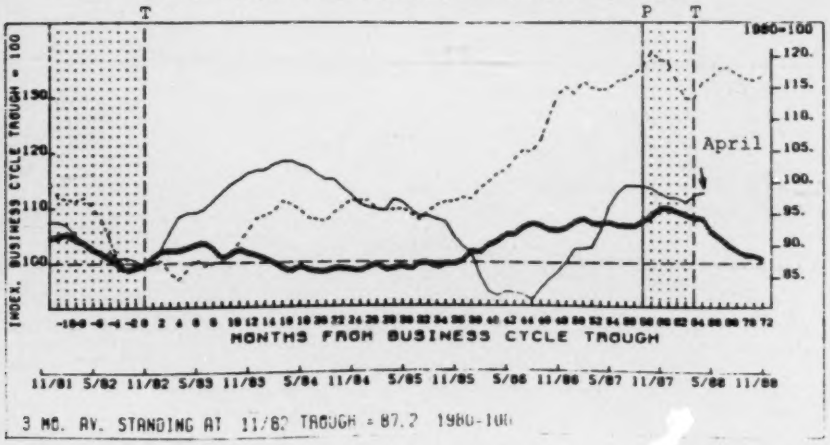
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.1 PERCENT

56. INDUSTRIAL MATERIALS PRICE INDEX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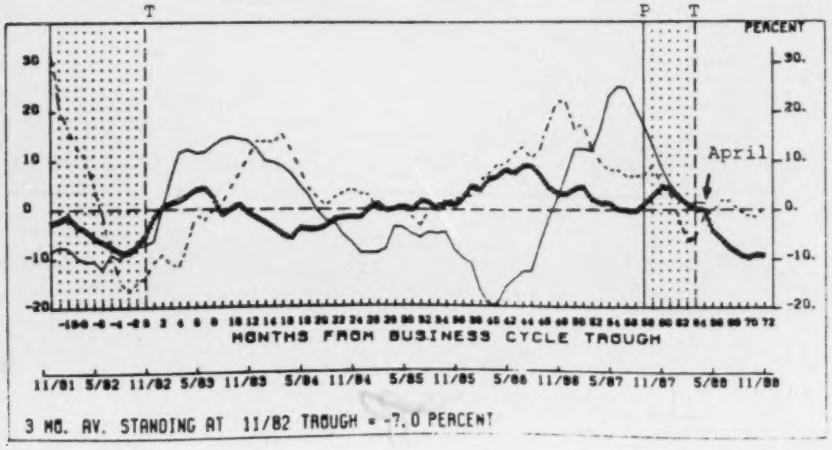
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 87.2 1980-100

57. INDUSTRIAL MATERIALS PRICE INDEX, GROWTH RATE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MONTHS FROM BUSINESS CYCLE TROUGH
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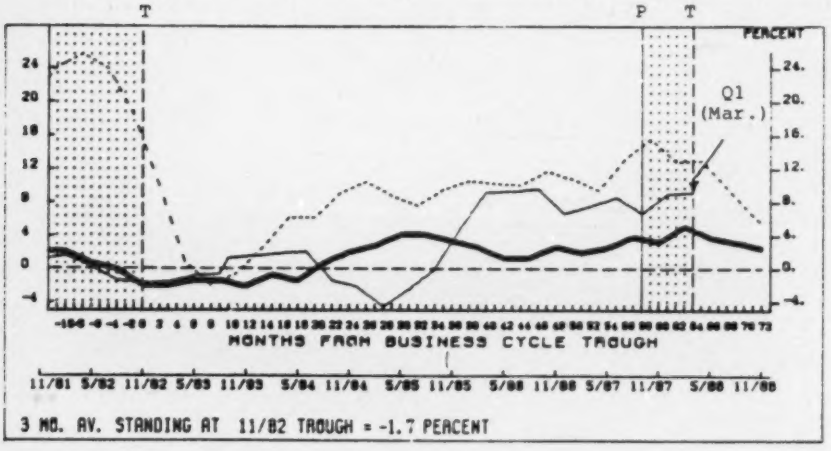
3 MO. AV. STANDING AT 11/82 TROUGH = -7.0 PERCENT

58. IMPORT PRICE INDEX (EXCLUDING FUELS), GROWTH RATE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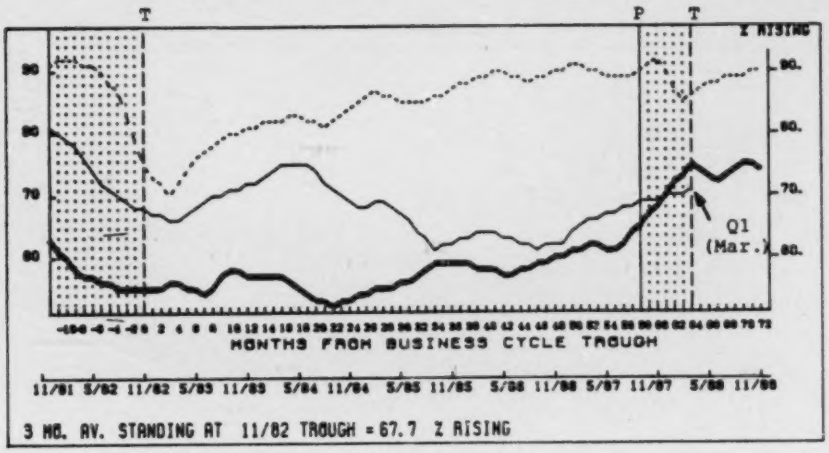
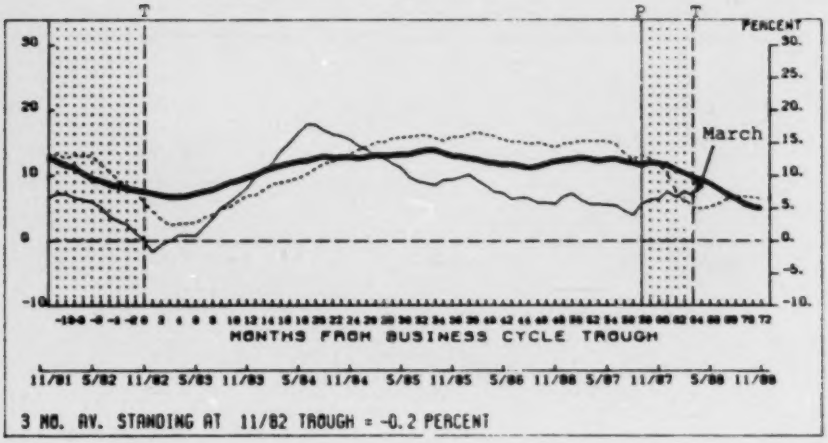
(Mar.)
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -1.7 PERCENT

59. BUSINESSMEN'S ANTICIPATED SELLING PRICES (SURVEY)

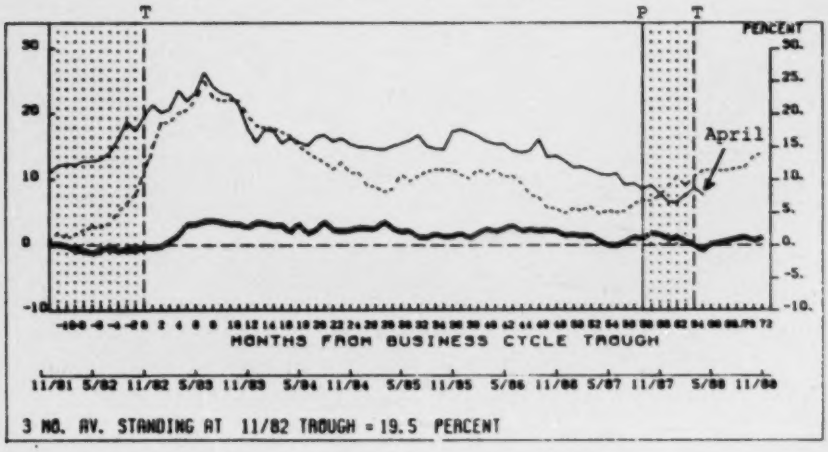


More companies are expecting inflation.

60. BUSINESS & CONSUMER DEBT, GROWTH RATE

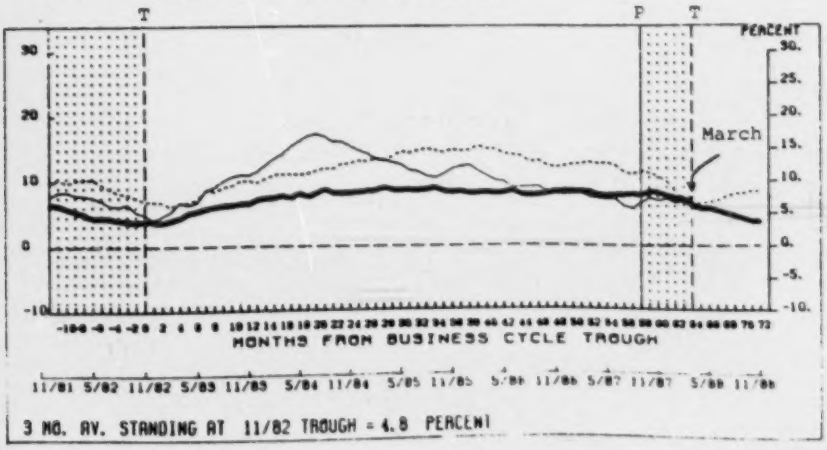


61. FEDERAL DEBT, GROWTH RATE

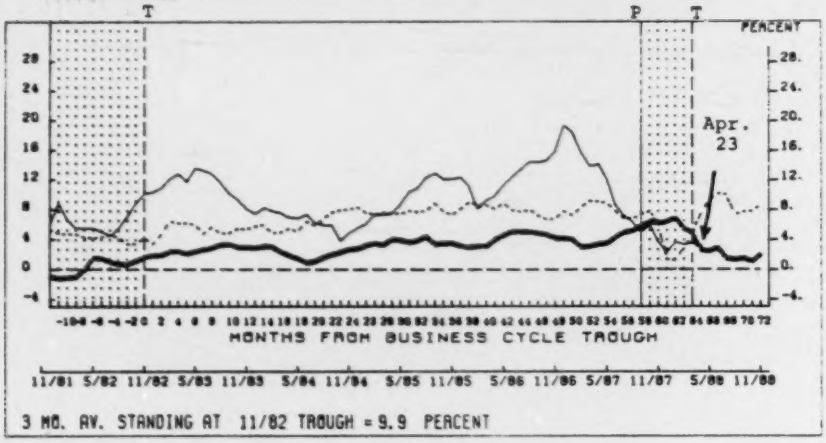


Growth in Federal debt is slowing, but 8 percent is still high.

62. TOTAL DEBT, GROWTH RATE



63. MONEY SUPPLY (M1), GROWTH RATE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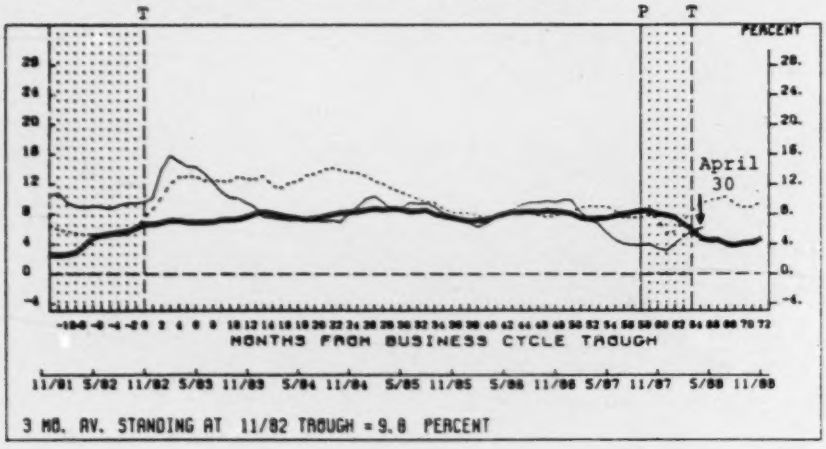
Apr.
23
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.9 PERCENT

64. MONEY SUPPLY (M2), GROWTH RATE


T
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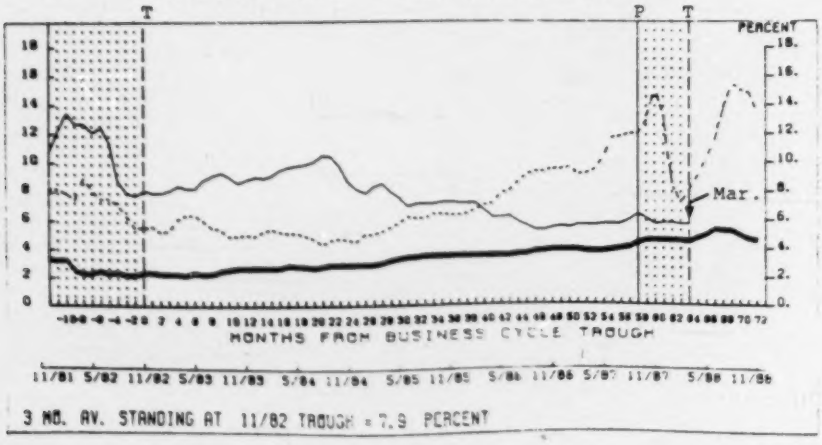
PERCENT
April
30
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.8 PERCENT

65. TREASURY BILL RATE (3-MONTH)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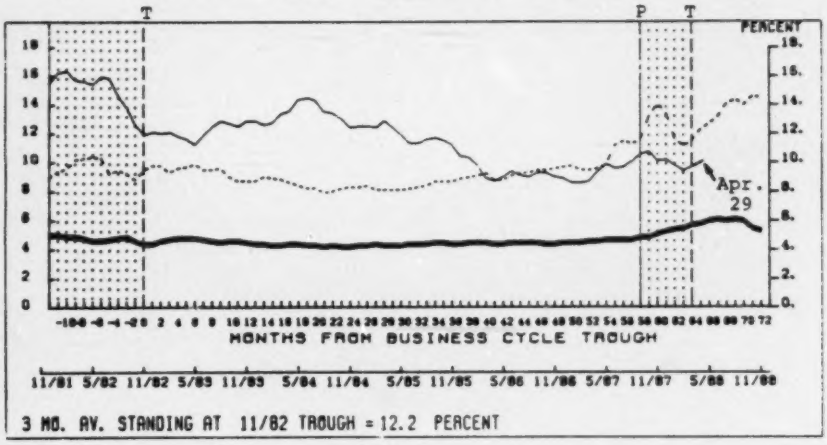
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 7.9 PERCENT

66. NEW CORPORATE BOND YIELD (AA)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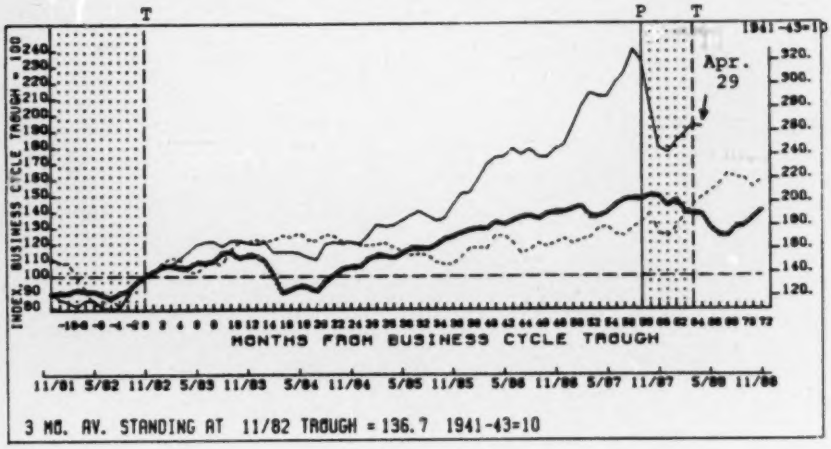
Apr.
29
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 12.2 PERCENT

67. COMMON STOCK PRICE INDEX (S&P 500)



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The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

A 1984 Supplement to Recession-Recovery Watch contains a detailed set of tables analyzing the behavior of all the indicators in this report during each cycle from 1948 to 1985.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

A Bimonthly Report Designed to Assist in the Evaluation of Current Business Conditions

Published by the Center for International Business Cycle Research, Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 10, No. 3
June 1988

NEW LEADING INDICATORS FOR SERVICE SECTOR

By Geoffrey H. Moore and Allan P. Layton

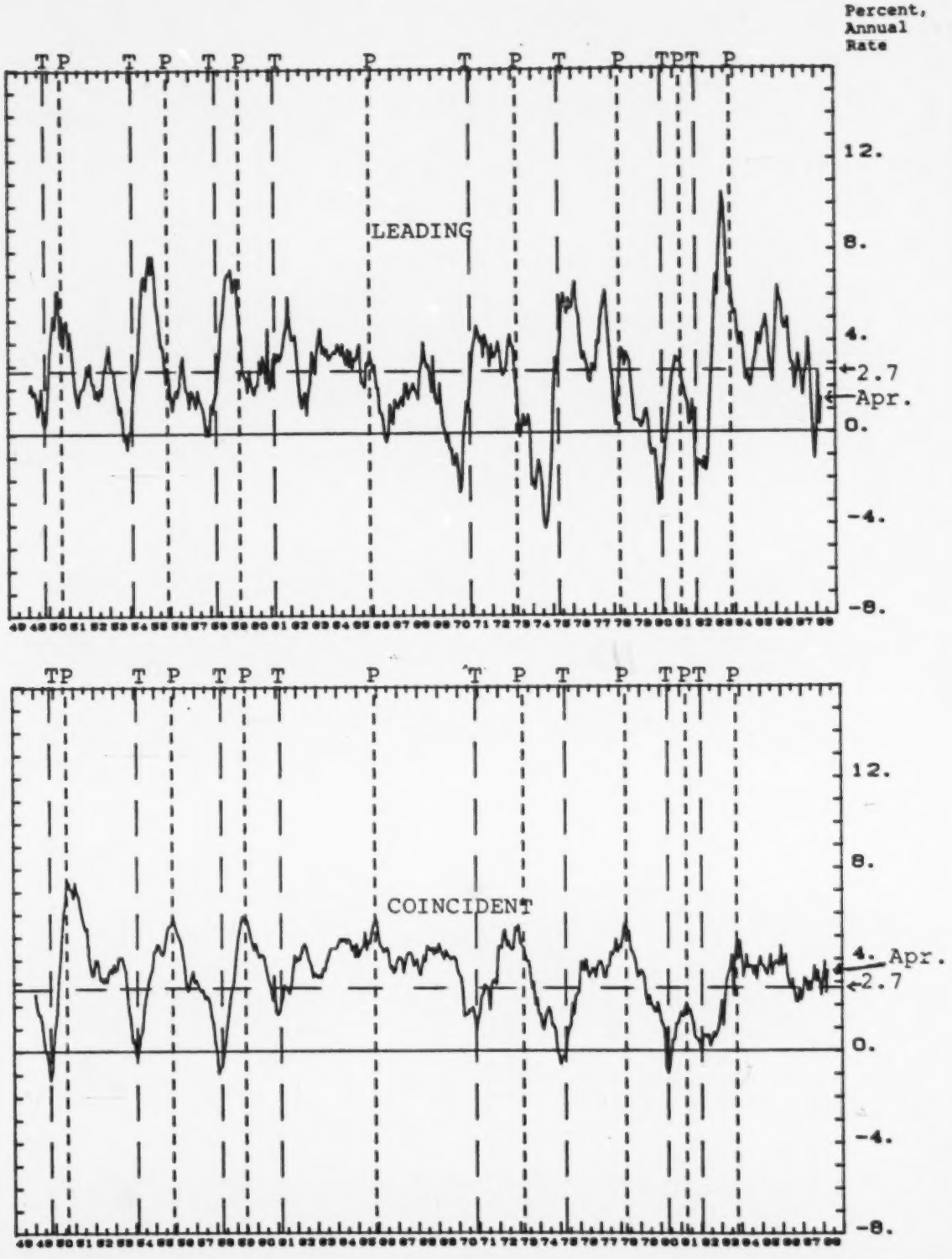
The service sector now accounts for about 65% of U.S. output but until now has been somewhat under-represented in available leading economic indexes. One reason for this is that many service producing industries continue to grow during periods in which goods producing industries contract. Indicators that do not display a pronounced business cycle tend to be neglected in the construction of leading economic indexes. Many of the indicators selected in the past, therefore, pertain to manufacturing or construction activity, which are highly sensitive to business cycles.

It is important, however, that indexes provide information pertaining to the entire economy. Given the degree to which the economy has become more service-oriented we feel it is useful for analysts to have at their disposal a set of indexes specifically designed to provide information on the service sector. Therefore, in a recently completed study, supported by the Coalition of Service Industries, we have prepared a set of leading and coincident indicators for the service industries, together with composite indexes. Analysis of the growth rates in these indexes suggests the presence of clearly recognizable cyclical swings in the service industries (see Chart 1.).

The coincident index, consisting of measures of services output, spending, employment and income, provides a comprehensive picture of the current phase of the service sector's growth cycle. The leading index, on the other hand, is constructed from economic series which could be expected to lead aggregate economic activity in services -- specifically, service industries' stock prices, corporate profits of service producing firms, the

CHART 1.

GROWTH RATES IN LEADING AND COINCIDENT INDEXES FOR SERVICES



Growth rates are based on the ratio of the current month's index to the average index for the preceding twelve months, expressed as a compound annual rate. Vertical lines are peaks (P) and troughs (T) in the service industries growth chronology. Horizontal dash line is the growth rate, 1976-86, in services output and in both indexes.

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average workweek in services, and contracts for the construction of commercial office space.

Latest Growth Rates Show Slowing Trend in Services

We have found that turns in the growth rate of the leading index occur about six months before those in the coincident index. Hence, the leading index should be helpful in forecasting whether future activity in the service sector is going to speed up or slow down. Current service growth rates (see below) seem to point to a slowing trend in the service business cycle. In view of the service sector's importance, advance warnings of this sort will have significant implications for the overall economy.

The latest figures for the services coincident index show a smoothed annual growth rate of 3.5% for April up from 2.5% in March. Growth rates in this index have been mostly in the 2.5% to 4% range since 1986. These are relatively modest growth rates, though certainly not as weak as they were in the general business recessions of 1975, 1980 and 1982 (see chart).

The services leading index suggests that this pattern of growth is likely to continue, or possibly weaken. The smoothed growth rate in the leading index for April was 1.5%, up from 0.3% in March. Since last October the leading index growth rates have been in the -1% to 2.5% range. These are not sufficiently low at this stage to spell recession, but they do suggest that the service sector's contribution to the growth of the economy during the remainder of 1988 will be relatively modest.

This view finds further support by looking at service sector activity since the business cycle trough in 1982 in comparison to corresponding developments in the sector following the 1961 and 1975 troughs. This comparison is provided in Chart 2. The historical record, when viewed in this way, also suggests that the most likely outcome for growth rates in the service sector is that they follow a fairly steady, or mildly moderating, growth path for the remainder of the year.

Services Slowdown Could Moderate Inflation

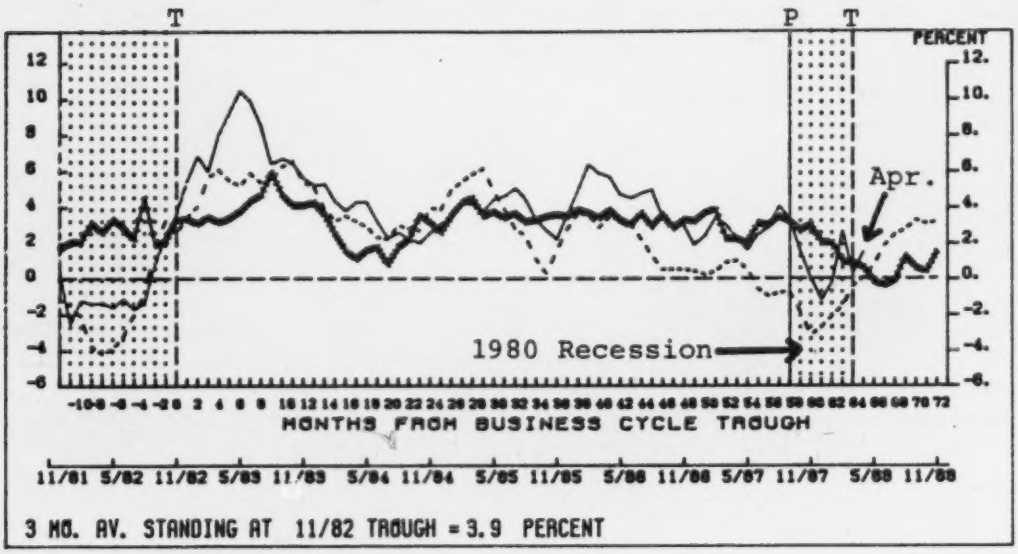
This development may carry with it some benefits with respect to inflation. The current rapid growth in manufacturing is putting upward pressure on prices of materials, wage rates, other costs, and selling prices. Slower growth in the service sector may offset this pressure to some degree. Since the prices of services constitute about 54% of the consumer price index, the overall inflation rate depends importantly on this sector, and it would be reasonable to expect the slower growth trend in services to have a moderating influence.

CHART 2.

PATTERNS OF CURRENT AND PREVIOUS LONG EXPANSIONS

———— Current expansion, 1982 to date
---------- 1975-80 expansion
~~~~~~~~~~ 1961-69 expansion

SERVICES LEADING INDEX, GROWTH RATE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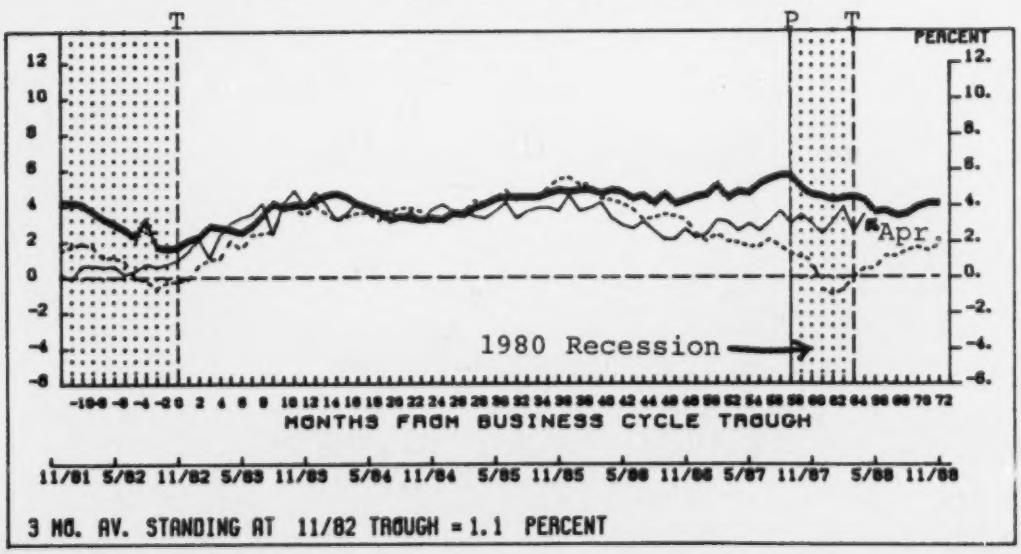
Apr.
1980 Recession
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 3.9 PERCENT

SERVICES COINCIDENT INDEX, GROWTH RATE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1980 Recession
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1.1 PERCENT

The vertical line at zero represents the business cycle trough date, where each expansion starts. The shaded areas represent periods of contraction. The vertical line at 58 represents the business cycle peak in January of 1980. The line at 64 represents the end of the contraction or trough date of July, 1980. The growth rates are six-month smoothed percent changes at an annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

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The components of the leading and coincident indexes for services and their movements in recent months are shown in Table 1. The figures are being kept up to date and will be distributed by CIBCR on a monthly basis. For further information call the Center at 212-280-2916.

TABLE 1.

LEADING INDEX OF SERVICES, AND COMPONENTS

	Leading Index (1967=100)	Leading Index Growth Rate (%)	Average Workweek, Services (hours)	Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate)	S&P Stock Price Index, Services, (Mar. 87=100)	Corporate Profits, Services (bil. 1982-84 $, ann. rate)
	1.	2.	3.	4.	5.	6.
1986:						
Jan.	152.1	5.0	33.13	782	74.7	106.3
Feb.	153.8	6.4	33.07	852	79.7	113.0
March	154.0	5.9	33.07	716	85.3	111.5
April	154.5	5.7	32.98	898	86.7	110.0
May	154.3	4.7	32.98	793	86.3	108.5
June	154.7	4.5	32.89	743	89.0	110.9
July	155.5	4.8	32.92	776	89.2	113.2
Aug.	156.2	5.0	32.89	779	91.2	115.6
Sept.	155.6	3.5	32.83	793	87.2	112.8
Oct.	155.7	3.0	32.85	768	87.9	110.1
Nov.	156.3	3.0	32.94	841	88.7	107.3
Dec.	156.0	1.9	32.75	829	89.2	107.9
1987:						
Jan.	156.9	2.4	32.80	829	93.5	108.5
Feb.	158.1	3.4	32.99	756	97.5	109.1
March	158.2	3.0	32.92	799	100.0	106.4
April	157.9	2.3	32.95	827	95.0	103.6
May	157.6	1.6	32.99	743	93.6	100.9
June	158.7	2.5	32.88	904	100.1	101.9
July	159.3	2.9	32.93	857	101.1	102.9
Aug.	160.7	4.1	33.06	851	107.7	103.8
Sept.	160.4	3.3	33.00	884	103.4	102.7
Oct.	159.3	1.5	32.97	813	92.1	101.5
Nov.	158.3	0.0	32.96	779	81.8	100.4
Dec.	157.4	-1.2	32.68	890	79.2	--
1988:						
Jan.	158.4	-0.2	32.90	716	82.3	--
Feb.	161.0	2.7	33.07	948	86.0	--
Mar.	159.2	0.3	32.72	771	87.5	--
Apr.	160.3	1.5	33.00	718	85.3	--

Note: Col. 2. The growth rate is a six-month smoothed percent change at an annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

Sources:
3. Bureau of Labor Statistics, Production and non-supervisory workers.
4. Department of Commerce, Bureau of Economic Analysis. Seasonally adjusted by CIBCR.
5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.
6. Department of Commerce, Bureau of Economic Analysis. Quarterly data interpolated by CIBCR and deflated by the CPI, All Urban Consumers, seasonally adjusted.

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TABLE 1., continued

COINCIDENT INDEX OF SERVICES, AND COMPONENTS

	Coincident Index	Coincident Index Growth Rate (%)	Services Output, GNP (bil. 1982$, ann. rate)	Services, Personal Consumption Expenditures (bil. 1982$, ann. rate)	Services Labor Income (bil. 1982-84$ ann. rate)	Service Employee Hours (bil., ann. rate)
	1.	2.	3.	4.	5.	6.
1986:						
Jan.	168.7	3.7	1715.8	1175.1	614.9	99.593
Feb.	169.4	3.9	1718.9	1182.0	619.6	99.774
March	170.2	4.2	1720.7	1186.4	627.3	100.050
April	170.0	3.3	1722.4	1180.8	626.4	100.146
May	170.2	2.9	1724.2	1183.9	627.6	100.254
June	170.5	2.7	1729.0	1189.6	626.0	100.390
July	171.2	3.1	1733.9	1194.4	629.2	100.775
Aug.	171.3	2.5	1738.7	1189.5	630.6	100.972
Sept.	171.3	2.1	1739.6	1192.7	629.8	100.843
Oct.	171.7	2.1	1740.4	1192.8	633.1	101.265
Nov.	172.6	2.7	1741.3	1201.6	638.4	101.798
Dec.	172.5	2.2	1748.9	1208.9	633.6	101.450
1987:						
Jan.	173.0	2.4	1756.4	1209.8	634.2	101.958
Feb.	174.1	3.2	1764.0	1218.2	638.0	102.936
March	174.4	3.1	1768.5	1222.6	638.1	102.898
April	174.3	2.6	1772.9	1222.5	639.0	102.461
May	175.0	3.0	1777.4	1221.5	641.3	103.613
June	175.1	2.7	1780.6	1225.3	639.9	103.621
July	175.9	3.1	1783.9	1233.7	643.0	104.051
Aug.	176.9	3.7	1787.1	1241.2	648.7	104.764
Sept.	176.7	3.0	1791.4	1239.6	646.0	104.692
Oct.	177.6	3.5	1795.7	1250.2	650.0	105.046
Nov.	177.7	3.0	1800.0	1242.3	652.2	105.330
Dec.	177.5	2.4	1804.2	1244.4	649.6	104.830
1988:						
Jan.	178.6	3.1	1808.4	1248.9	655.9	105.932
Feb.	179.8	3.9	1812.6	1258.4	659.4	107.072
Mar.	179.0	2.5	...	1260.0	655.0	106.348
Apr.	180.3	3.5	...	1263.7	661.5	107.397

Sources: 3. Department of Commerce, Bureau of Economic Analysis. Quarterly data interpolated by CIBCR.
4. Department of Commerce, Bureau of Economic Analysis.
5. Bureau of Labor Statistics. Payroll index, 1977=100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.
6. Bureau of Labor Statistics, all employees.

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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover more than sixty indicators and give the information needed to compare the current expansion with two very long expansion since 1961. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business percentages of business cycle trough standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 66 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Actual Levels

		UNIT	Months After Business cycle Trough	Expansions Starting Feb. 1961	Expansions Starting Mar. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	65	-6.0	-6.6	-5.2	APR
6A.	LONG LEADING INDEX, GROWTH RATE	%	65	-6.2	-2.9	8.0	APR
6B.	N.A.P.M. INDEX, GROWTH RATE	%	66	6.1	-4.3	5.1	MAY
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	66	7.1	0.2	5.6	MAY
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	66	7.7	-4.8	6.0	MAY
9.	LEADING INDEX, GROWTH RATE.	%	65	0.6	-0.3	1.6	APR
10.	COINCIDENT INDEX, GROWTH RATE	%	65	8.5	-7.6	4.4	APR
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	66	53.0	41.0	41.0	MAY
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	65	100.3	117.2	122.0	APR
15.	NINE-COUNTRY LEADING INDEX, GROWTH RATE	%	64	4.1	-2.6	4.2	MAR
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	210	5.3	-2.4	4.1	Q1
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	66	57.7	59.3	62.6	MAY
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	66	79.0	27.3	67.6	MAY
29.	UNEMPL. SEVERITY INDEX	WEEKS PER 100 IN LABOR FORCE	66	36.3	95.5	75.9	MAY
30.	UNEMPLOYMENT RATE: TOTAL	%	66	3.7	7.4	5.5	MAY
31.	UNEMPLOYMENT RATE: INSURED	%	66	2.4	4.2	2.1	MAY
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	66	3.1	5.3	4.2	MAY
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	66	2.8	6.1	3.5	MAY
35.	PART-TIME EMPLOYMENT RATIO	%	66	5.1	2.9	3.1	MAY
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO (TIMES 10)	%	64	14.5	16.8	15.2	MAR
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	64	50.0	-27.0	32.8	MAR
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	210	1.5	-1.1	2.1	Q1
45.	UNIT LABOR COSTS, GROWTH RATE	%	210	5.1	12.4	1.4	Q1
46.	HOURLY COMPENSATION, GROWTH RATE	%	210	6.8	11.1	3.5	Q1
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	210	3.3	-3.1	-0.2	Q1
48.	SELLING PRICE INDEX, GROWTH RATE	%	210	3.7	10.4	1.4	Q1
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	210	-1.4	-2.0	0.0	Q1
50.	CORPORATE PROFIT MARGIN	%	200	13.7	4.4	6.2	Q4
51.	PRICE/LABOR COST RATIO	1977=100	210	101.1	95.8	99.6	Q1
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	65	2.9	11.5	4.0	APR
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	66	-4.2	-0.2	0.0	MAY
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	64	4.7	13.0	9.2	Q1(MAR)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	64	75.0	86.0	71.0	Q1(MAR)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	65	9.3	5.1	7.2	APR
61.	FEDERAL DEBT, GROWTH RATE	%	66	0.2	11.6	7.5	MAY
62.	TOTAL DEBT, GROWTH RATE	%	65	5.7	6.6	7.3	APR
63.	MONEY SUPPLY (M1), GROWTH RATE	%	66	2.4	9.4	4.2	MAY
64.	MONEY SUPPLY (M2), GROWTH RATE	%	66	4.5	9.9	6.6	MAY
65.	TREASURY BILL RATE (3-MONTH)	%	66	5.0	10.3	6.3	MAY
66.	NEW CORPORATE BOND YIELD (AA)	%	66	6.0	12.7	10.3	MAY

TABLE 2

RECESSION-RECOVERY STATUS UP TO 66 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Percentage Change from Trough Levels

	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes					
1. BUSINESS WEEK LEADING INDEX (CIBCR)	65	25.8	22.4	42.2	APR
1A. LONG LEADING INDEX (CIBCR)	65	46.5	14.4	63.1	APR
1B. N.A.P.M. INDEX	66	42.6	22.3	31.0	MAY
2. LEADING EMPLOYMENT INDEX (CIBCR)	66	42.7	24.5	39.3	MAY
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)	66	43.1	35.2	45.9	MAY
4. LEADING INDEX (BCD)	65	38.3	27.1	37.6	APR
5. COINCIDENT INDEX (BCD)	65	45.2	24.3	32.0	APR
12. LAGGING INDEX (BCD)	65	27.0	2.5	19.1	APR
14. NINE-COUNTRY LEADING INDEX (CIBCR)	64	10.2	24.2	36.1	MAR
II. Output, Income and Sales					
16. REAL GNP	210	31.4	19.5	24.0	Q1
18. INDUSTRIAL PRODUCTION INDEX	66	56.1	30.2	35.3	MAY
19. REAL PERSONAL INCOME	65	30.6	18.8	20.1	APR
20. REAL CONSUMER EXPENDITURES	65	29.0	18.7	21.6	APR
21. REAL RETAIL SALES	65	31.2	16.1	28.1	APR
III. Employment and Unemployment					
22. TOTAL EMPLOYMENT	66	11.4	15.9	15.0	MAY
24. NONFARM EMPLOYMENT	66	20.3	17.7	18.9	MAY
25. NONFARM EMPLOYEE-HOURS	66	20.5	15.8	18.9	MAY
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES.	66	19.1	12.2	10.7	MAY
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	66	15.3	19.8	14.7	MAY
32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	66	-51.3	-7.9	-48.4	MAY
36. AVERAGE WORKWEEK, MANUFACTURING	66	5.3	1.6	5.4	MAY
37. OVERTIME HOURS, MANUFACTURING	66	85.7	12.5	73.9	MAY
IV. Investment Commitments and Inventories					
38. NEW PRIVATE HOUSING STARTS	66	-9.8	52.1	7.9	MAY
39. NEW PRIVATE HOUSING PERMITS	66	-13.6	81.4	13.3	MAY
40. CONTRACT & ORDERS, PLANT & EQUIPMENT	65	83.7	35.7	67.1	APR
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING	200	145.4	66.1	65.2	Q4
V. Productivity, Wages, Costs, Prices and Profits					
52. LARGE BUSINESS FAILURES	66	21.5	67.6	-16.7	MAY
53. LEADING INDEX OF INFLATION (CIBCR)	65	14.0	9.0	19.8	APR
54. CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	65	8.7	57.7	19.7	APR
56. INDUSTRIAL MATERIALS PRICE INDEX	66	5.8	33.6	12.6	MAY
VI. Money, Credit, Interest Rates and Stock Prices					
67. STOCK PRICE INDEX (S&P 500)	66	30.1	52.7	87.3	MAY

TABLE 3

RECESSION-RECOVERY STATUS UP TO 66 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Differences from Trough Levels

	Unit	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes						
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	65	-12.5	-1.3	-9.7	APR
6A. LONG LEADING INDEX, GROWTH RATE	%	65	-11.0	-2.9	-8.1	APR
6B. N.A.P.M. INDEX, GROWTH RATE	%	66	6.2	12.8	8.3	MAY
7. LEADING EMPLOYMENT INDEX, GROWTH RATE	%	66	9.3	10.1	4.7	MAY
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	66	15.7	11.9	13.9	MAY
9. LEADING INDEX, GROWTH RATE.	%	65	-0.7	13.2	-3.0	APR
10. COINCIDENT INDEX, GROWTH RATE	%	65	15.3	7.5	11.2	APR
11. DIFFUSION INDEX OF LEADING INDICATORS	% RISING	66	16.3	23.3	-5.7	MAY
13. RATIO, COINCIDENT TO LAGGING INDEX	1967=100	65	12.5	20.5	11.9	APR
15. NINE-COUNTRY LEADING INDEX, GROWTH RATE	%	64	0.5	9.2	4.5	MAR
II. Output, Income and Sales						
17. REAL GNP GROWTH RATE	%	210	4.7	2.6	5.2	Q1
III. Employment and Unemployment						
23. EMPLOYMENT TO POPULATION RATIO	%	66	1.4	2.8	4.9	MAY
28. EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	66	58.7	13.2	46.2	MAY
29. UNEMPL. SEVERITY INDEX WEEKS PER 100 IN	LABOR FORCE	66	-55.3	-5.8	-108.1	MAY
30. UNEMPLOYMENT RATE: TOTAL	%	66	-2.9	-0.9	-5.0	MAY
31. UNEMPLOYMENT RATE: INSURED	%	66	-3.9	-2.1	-2.9	MAY
33. SHORT-DURATION UNEMPLOYMENT RATE	%	66	-1.6	-0.7	-2.3	MAY
34. LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	66	-3.6	-2.4	-5.5	MAY
35. PART-TIME EMPLOYMENT RATIO	%	66	3.4	0.1	1.2	MAY
IV. Investment Commitments and Inventories						
42. INVENTORY/SALES RATIO (TIMES 10)	%	64	-10.3	-4.7	-18.7	MAR
43. CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	64	75.0	31.2	73.9	MAR
V. Productivity, Wages, Costs, Prices and Profits						
44. OUTPUT PER HOUR, GROWTH RATE	%	210	-0.3	-0.6	1.0	Q1
45. UNIT LABOR COSTS, GROWTH RATE	%	210	3.8	1.0	-3.9	Q1
46. HOURLY COMPENSATION, GROWTH RATE	%	210	3.6	0.0	-3.0	Q1
47. REAL HOURLY COMPENSATION, GROWTH RATE	%	210	1.5	-3.3	-2.5	Q1
48. SELLING PRICE INDEX, GROWTH RATE	%	210	4.0	-2.8	-2.9	Q1
49. GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	210	0.2	-3.8	1.0	Q1
50. CORPORATE PROFIT MARGIN	%	200	4.5	-1.3	2.3	Q4
51. PRICE/LABOR COST RATIO	1977=100	210	4.5	-1.3	4.2	Q1
55. CONSUMER PRICE INDEX, GROWTH RATE	%	65	1.7	1.8	-0.1	APR
57. INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	66	0.5	12.9	7.0	MAY
58. IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	64	6.5	-2.6	10.9	Q1(MAR)
59. ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	64	20.0	10.3	3.3	Q1(MAR)
VI. Money, Credit, Interest Rates and Stock Prices						
60. BUSINESS & CONSUMER DEBT, GROWTH RATE	%	65	1.8	-0.8	7.5	APR
61. FEDERAL DEBT, GROWTH RATE	%	66	0.7	0.3	-12.0	MAY
62. TOTAL DEBT, GROWTH RATE	%	65	1.9	-0.5	2.6	APR
63. MONEY SUPPLY (M1), GROWTH RATE	%	66	0.8	5.7	-5.7	MAY
64. MONEY SUPPLY (M2), GROWTH RATE	%	66	-2.0	2.4	-3.2	MAY
65. TREASURY BILL RATE (3-MONTH)	%	66	2.6	4.7	-1.6	MAY
66. NEW CORPORATE BOND YIELD (AA)	%	66	1.6	3.4	-2.0	MAY

HOW TO READ CHARTS

ACTUAL LEVEL CHARTS

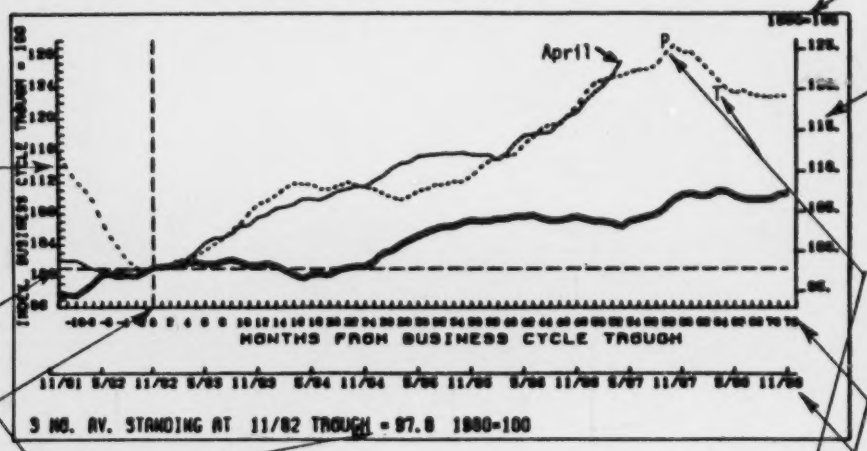
TITLE: If the title does not say "growth rate," then the chart is for the actual level, rather than the growth rate.

LEFT-HAND SCALE measures movements of both current and past expansions, relative to their standing at the respective reference troughs (i.e. for each expansion the standing at the trough equals 100). This is the common vertical scale along which the expansions are compared.

HORIZONTAL DOTTED LINE shows level at reference trough (100) for current and past expansions.

VERTICAL DOTTED LINE represents reference trough dates for current and past expansions, which are all aligned so that the reference trough dates are positioned on the vertical line.

STANDING AT THE TROUGH for the current expansion (when the expansion began) is typically calculated as the 3-month average centered on the trough month.

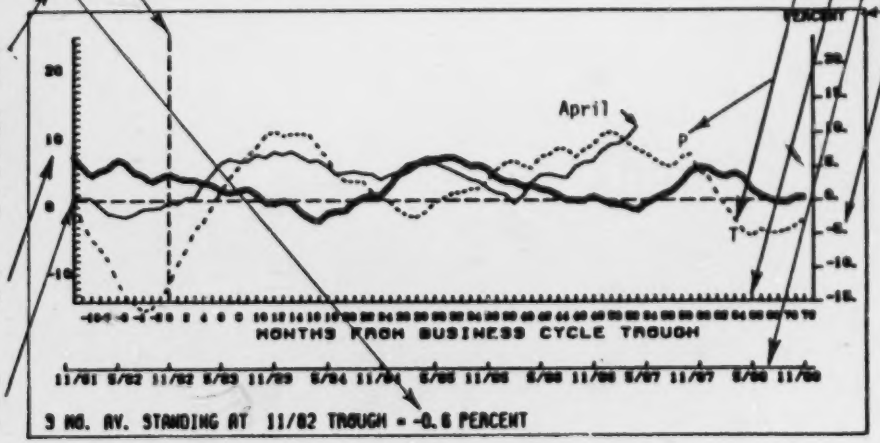

14. EIGHT-COUNTRY LEADING INDEX (CIBCR)
April
P
T
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 97.8 1980=100

GROWTH RATE CHARTS

TITLE: If the title says "growth rate," then the chart is for the "6-month smoothed growth rate," rather than the actual level. These growth rates are obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

LEFT-HAND SCALE, (same as the right-hand scale) shows growth rates in percent for both current and past expansions.

HORIZONTAL DOTTED LINE is drawn typically at 0% growth rate, a natural reference level for both current and past expansions.



UNIT for right-hand scale, which refers only to the current expansion.

RIGHT-HAND SCALE refers only to current expansion. It is a transformation of the left hand scale to show the current expansion in original units rather than with trough standing = 100.

P indicates the January 1980 PEAK, marking the start of the 1980 recession, which lasted till the July 1980 TROUGH, indicated by T.

HORIZONTAL SCALE measures months from business cycle trough for both the current and the past expansions. This is the common time scale along which the recoveries are compared.

ACTUAL DATES, referring only to the current expansion.

UNIT for both scales (percent), referring to both current and past growth rates in expansions.

RIGHT-HAND SCALE, which refers to both current and past expansions.

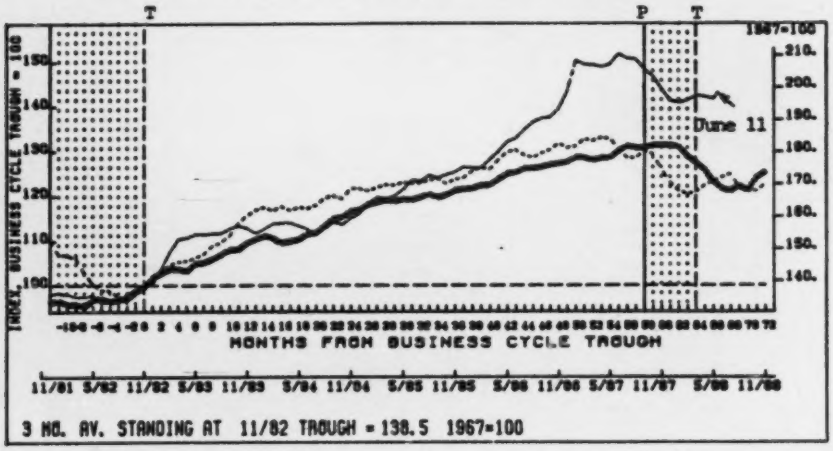
——— THICK LINE indicates 1961-69 expansion (from February 1961) which continued for 106 months.

---------- DOTTED LINE indicates the 1975-80 expansion (from Mar. 1975), which ended after 58 months, and the subsequent recession (from January 1980 to July 1980).

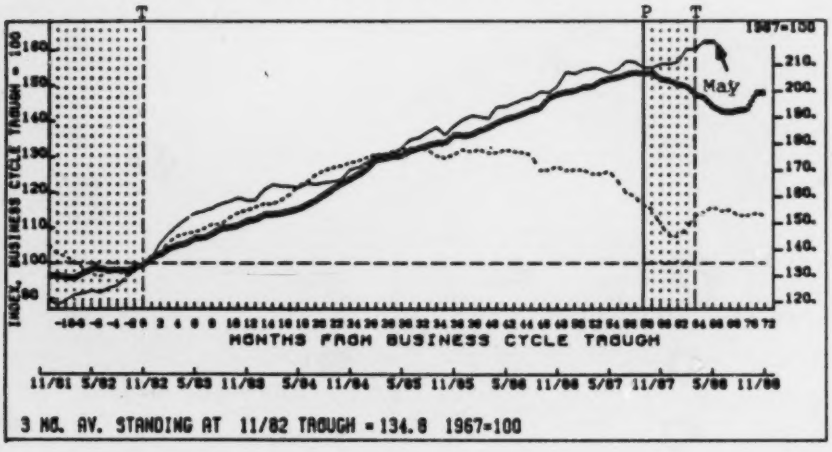
——— THIN LINE indicates the current expansion (business cycle trough: November 1982 or IV Q 1982).

COMPOSITE INDEXES

1. BUSINESS WEEK LEADING INDEX (CIBCR)

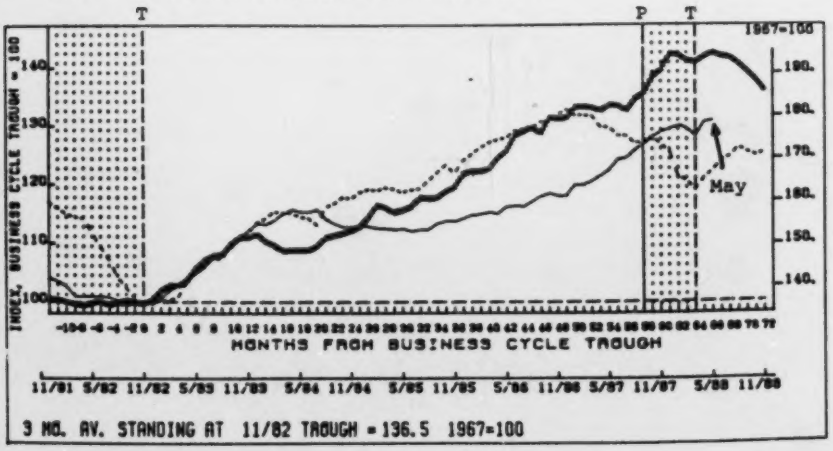


1A. LONG-LEADING INDEX (CIBCR)



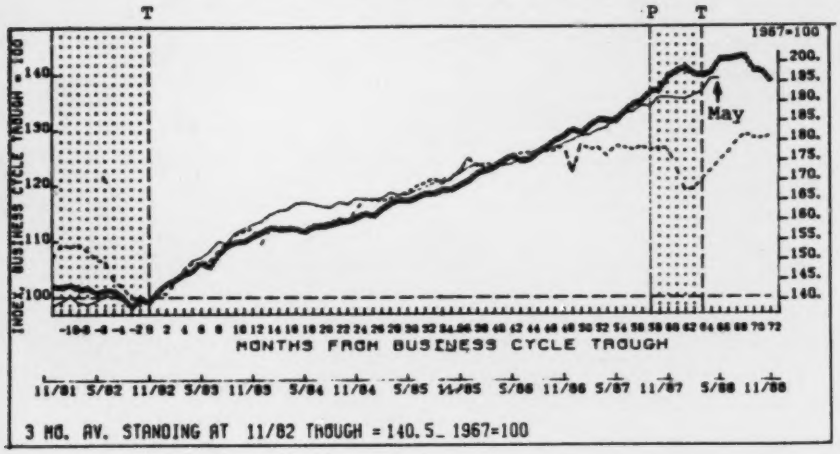
Going strong.

1B. N.A.P.M. LEADING INDEX

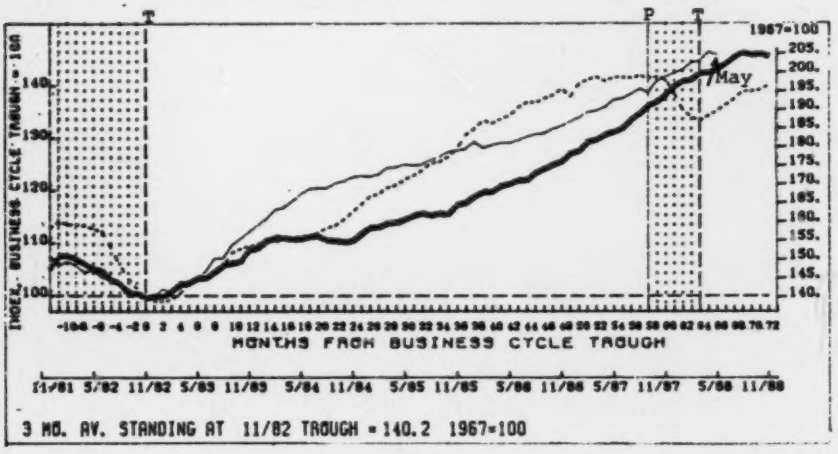


April at a new high.

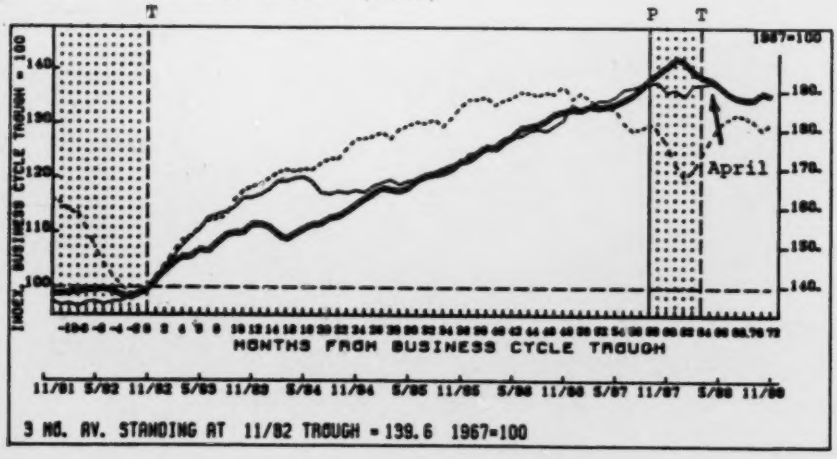
2. LEADING EMPLOYMENT INDEX (CIBCR)



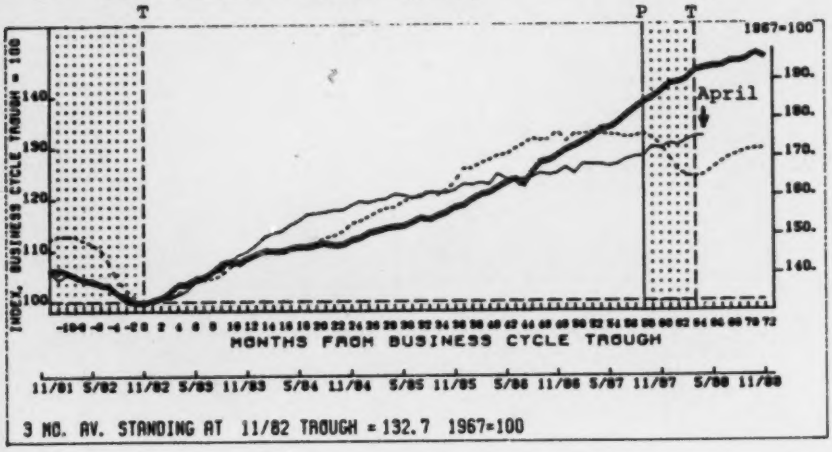
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)



4. LEADING INDEX (BCD)

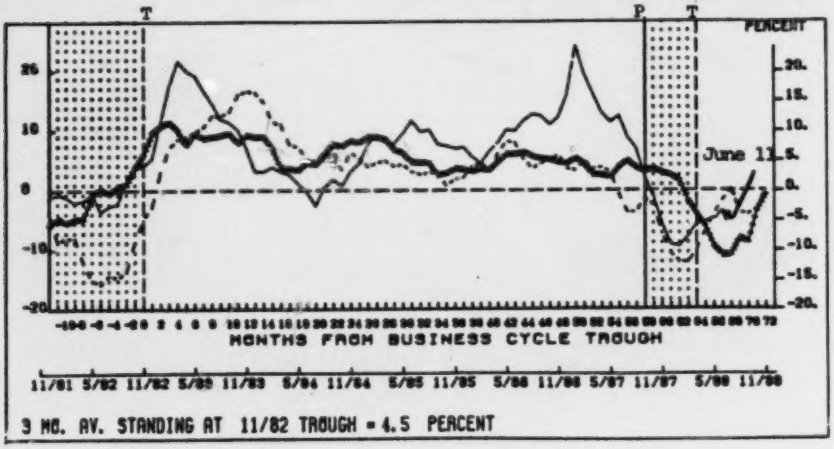


5. COINCIDENT INDEX (BCD)

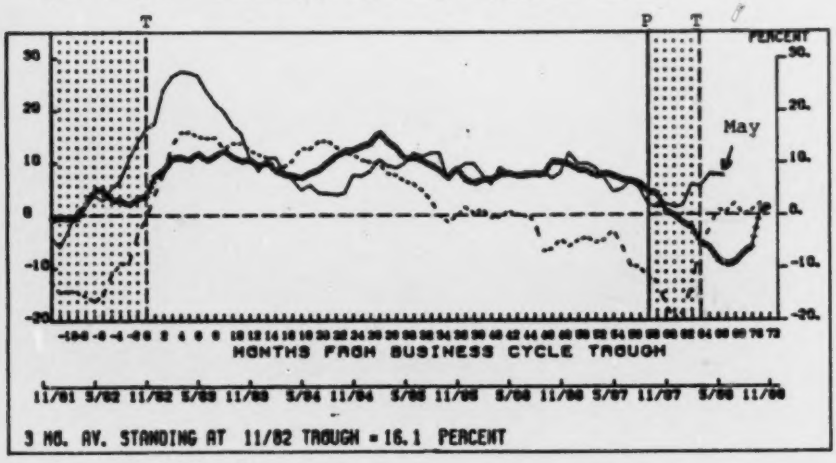

T
P
T
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
April
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 132.7 1967=100

COMPOSITE INDEX GROWTH RATES

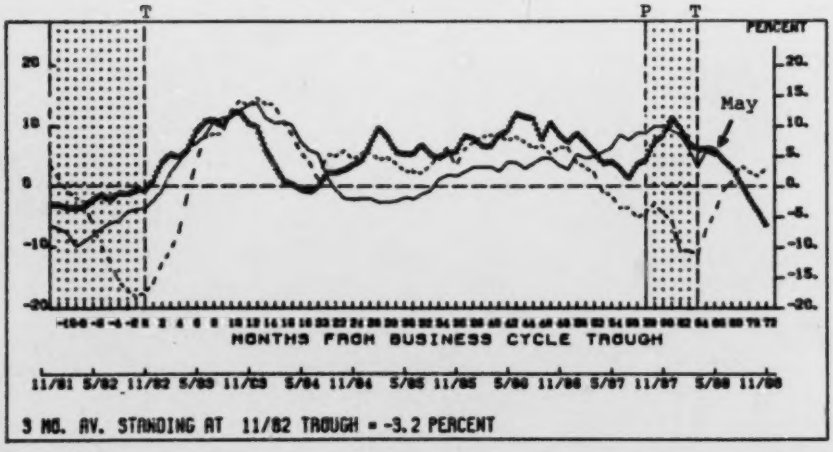
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE



6A. LONG-LEADING INDEX, GROWTH RATE

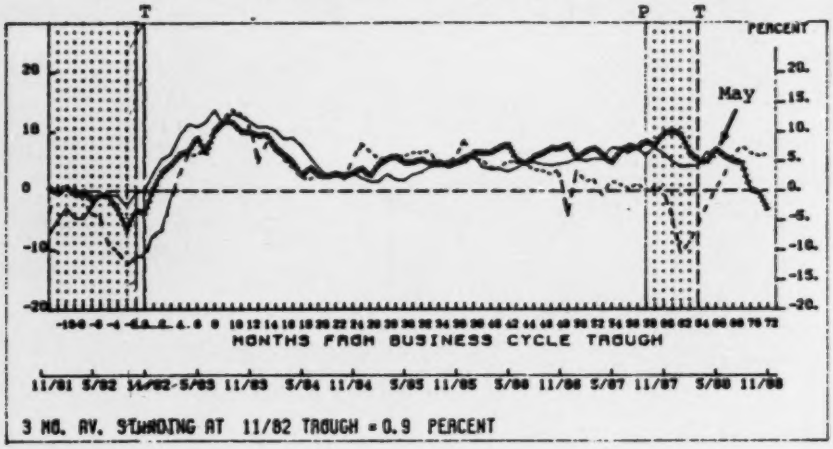


6B. N.A.P.M. LEADING INDEX, GROWTH RATE



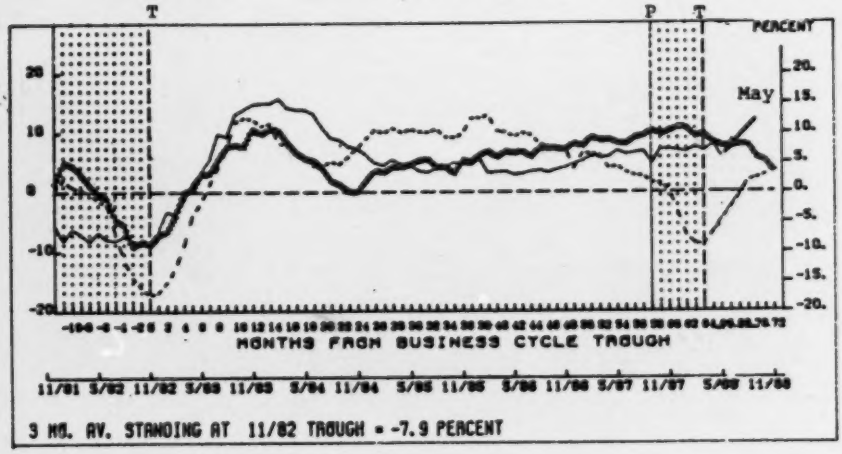
Off the slowdown track.

7. LEADING EMPLOYMENT INDEX, GROWTH RATE

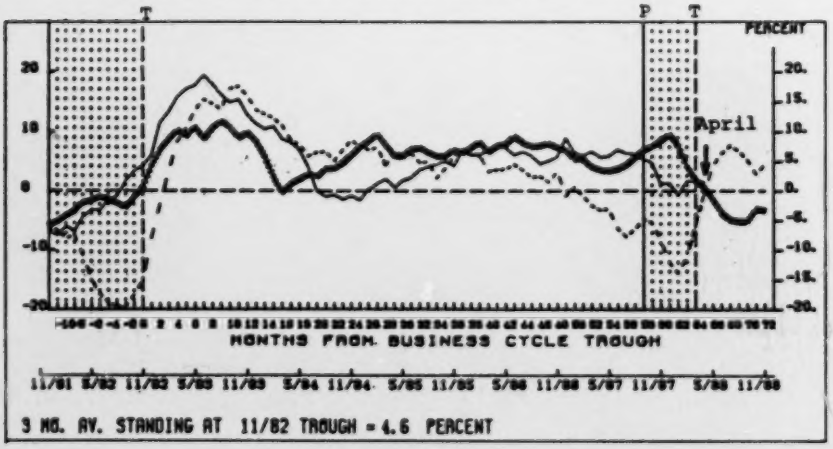


Retracing history, circa 1961-69.

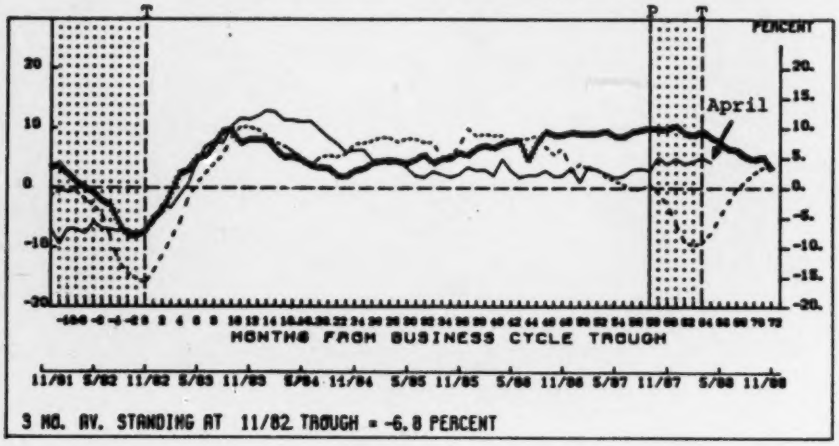
8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE (CIBCR)



9. LEADING INDEX, GROWTH RATE (BCD)

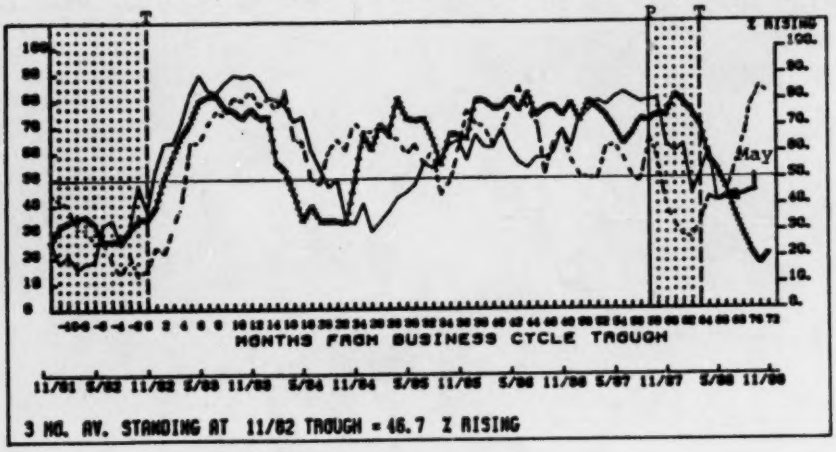


10. COINCIDENT INDEX, GROWTH RATE (BCD)

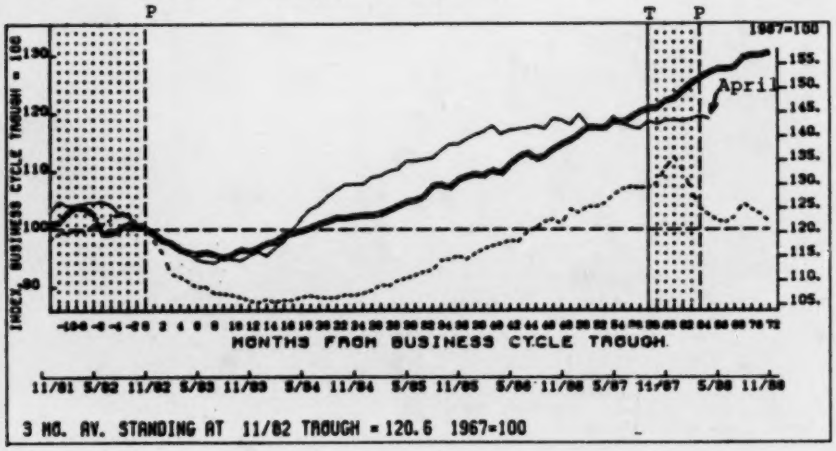


OTHER COMPOSITE INDEXES

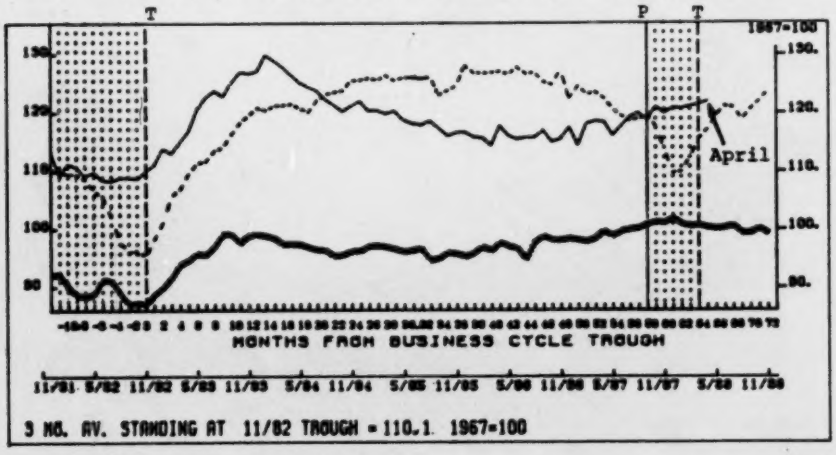
11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)



12. LAGGING INDEX (BCD)

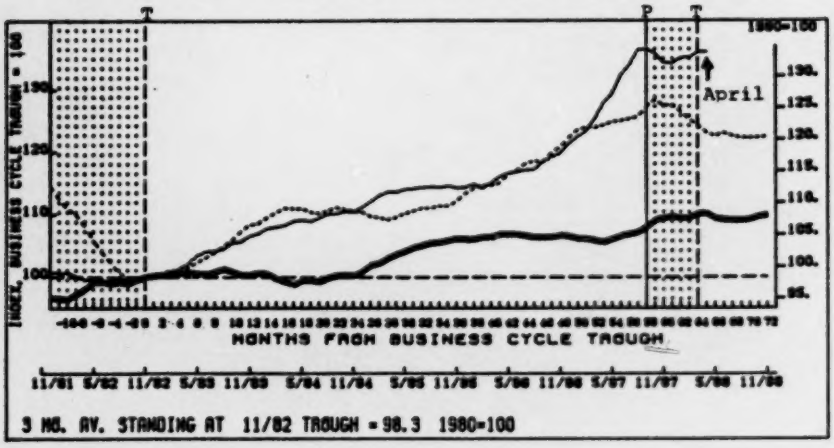


13. RATIO, COINCIDENT TO LAGGING INDEX

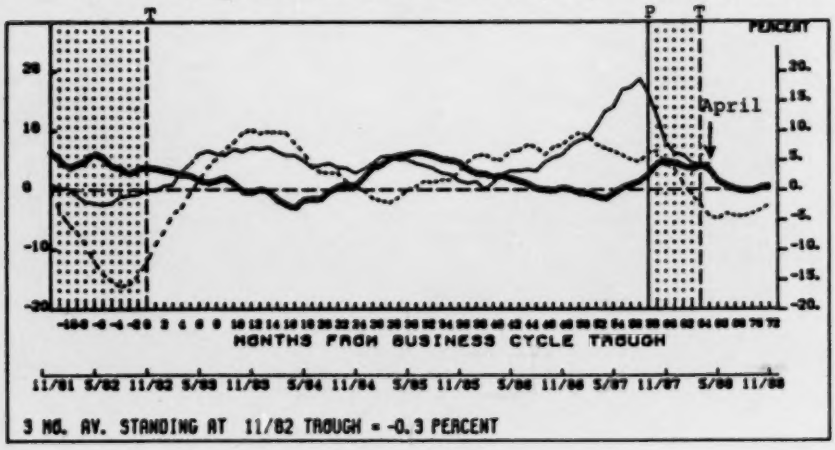


OTHER COMPOSITE INDEXES

14. NINE-COUNTRY LEADING INDEX (CIBCR)*



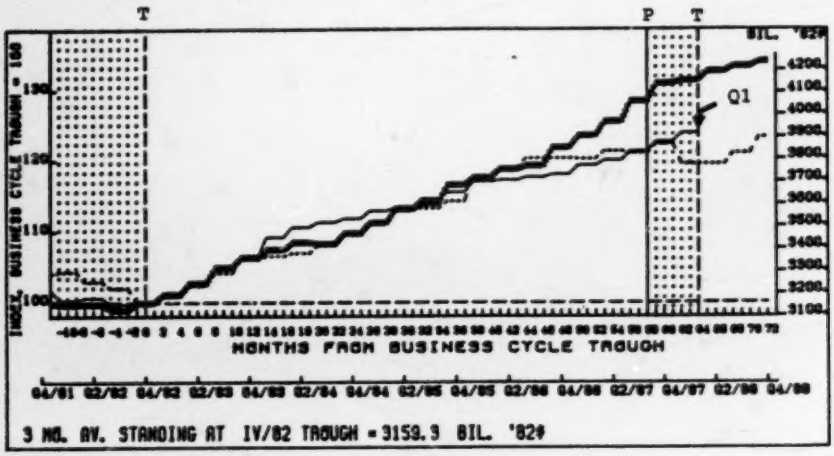
15. NINE-COUNTRY LEADING INDEX, GROWTH RATE



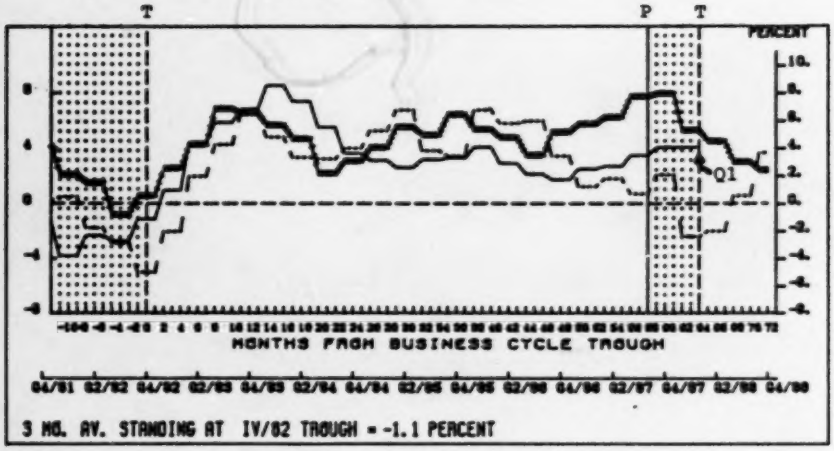
*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia, Taiwan, R.O.C. and Korea, R.O.K.

OUTPUT, INCOME AND SALES

16. REAL GNP

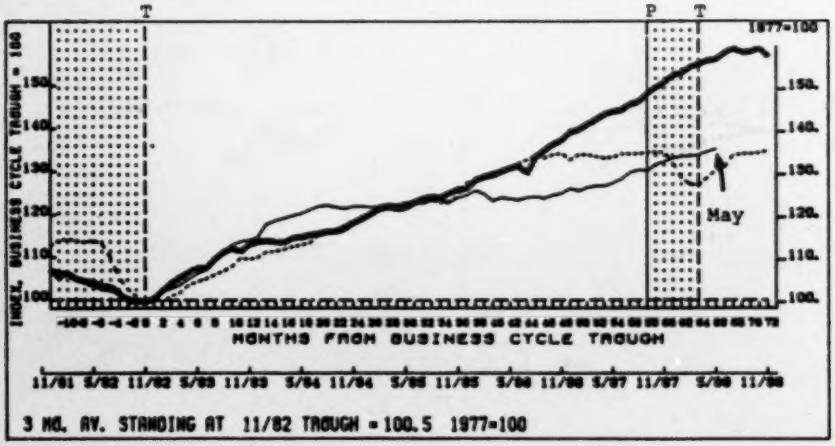


17. REAL GNP, GROWTH RATE

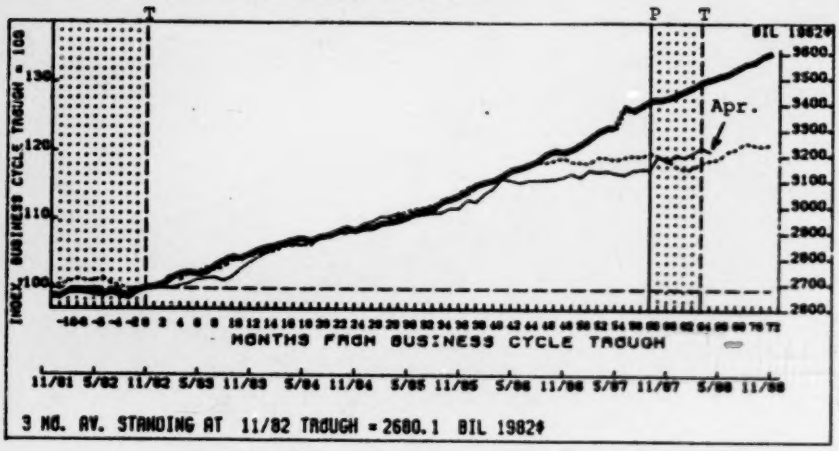


Still climbing.

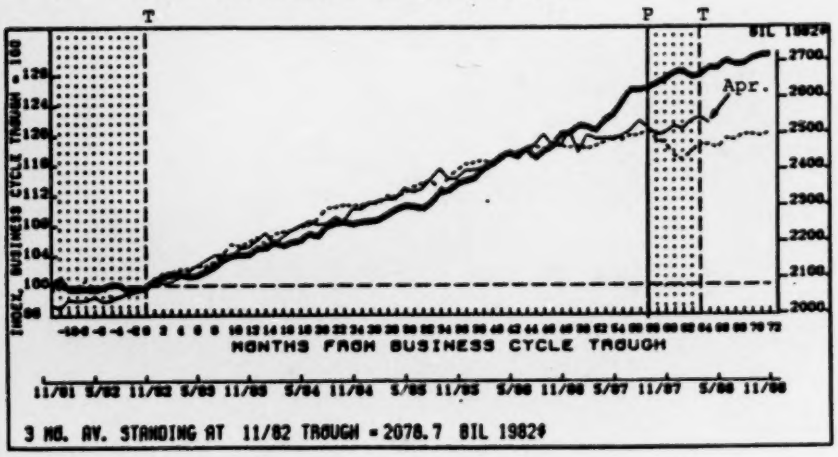
18. INDUSTRIAL PRODUCTION INDEX



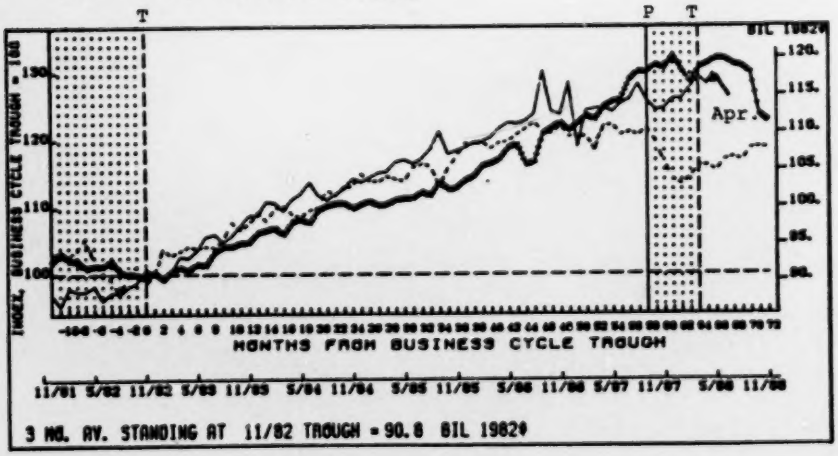
19. REAL PERSONAL INCOME



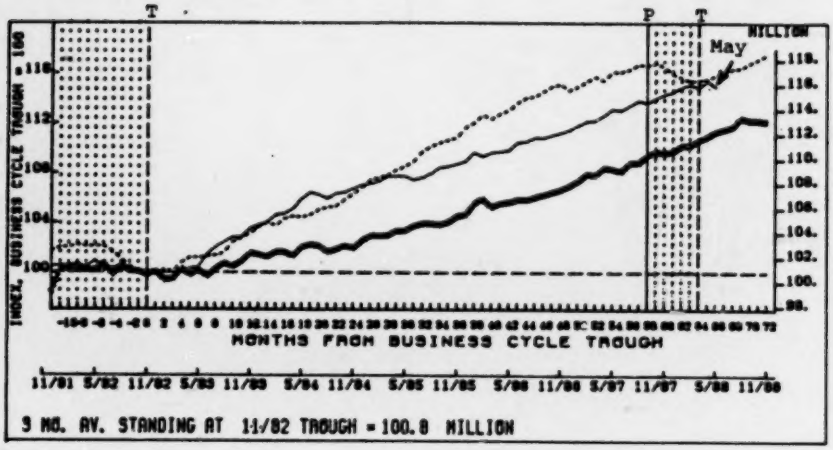
20. REAL CONSUMER EXPENDITURES



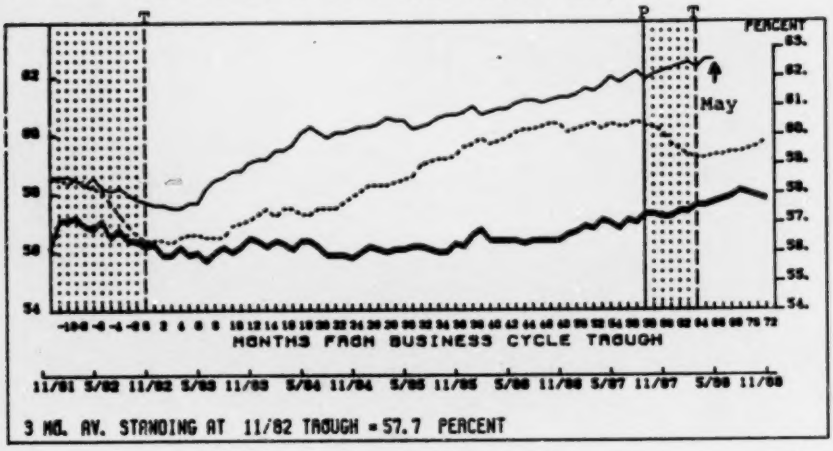
21. REAL RETAIL SALES



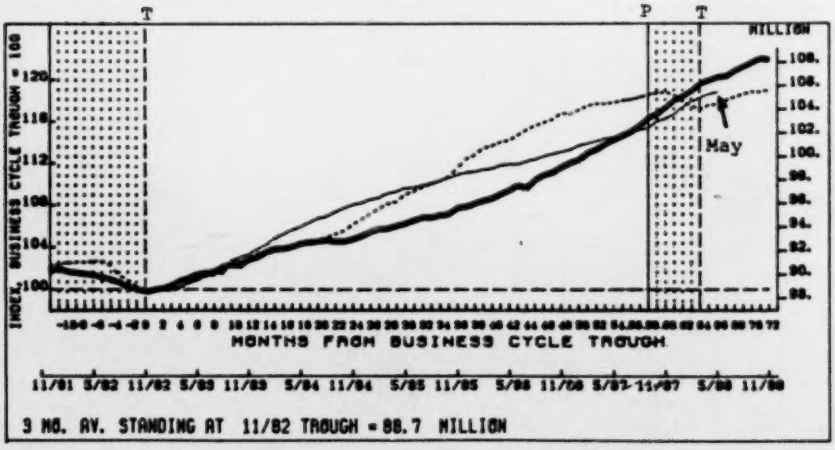
22. TOTAL EMPLOYMENT



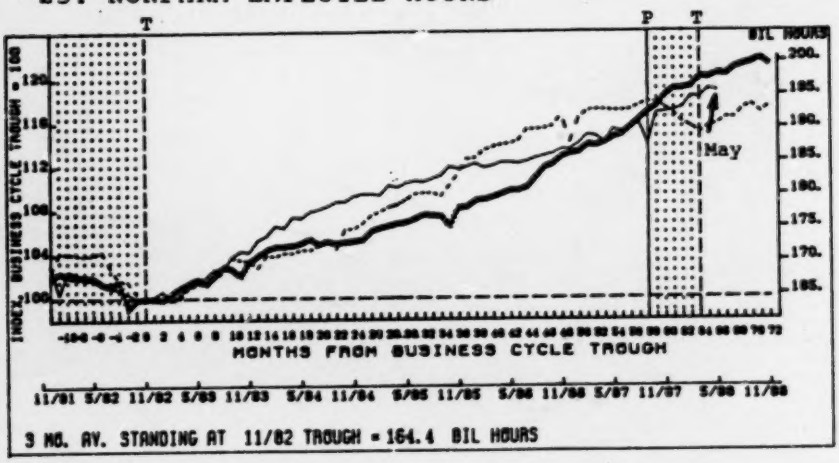
23. EMPLOYMENT TO POPULATION RATIO



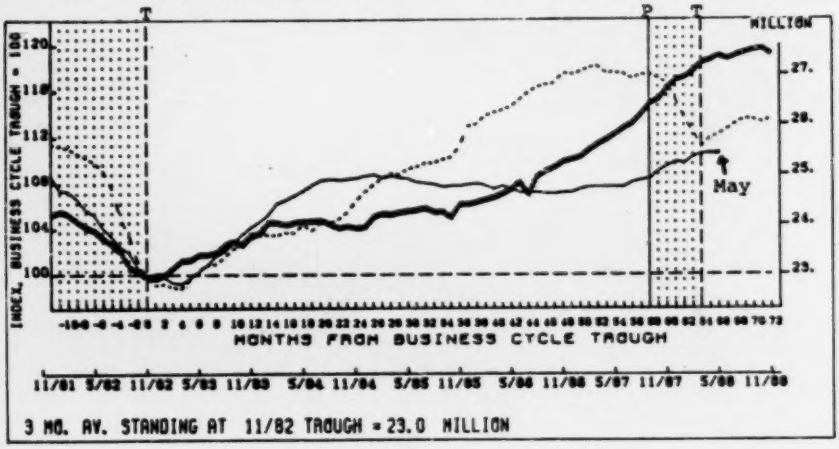
24. NONFARM EMPLOYMENT



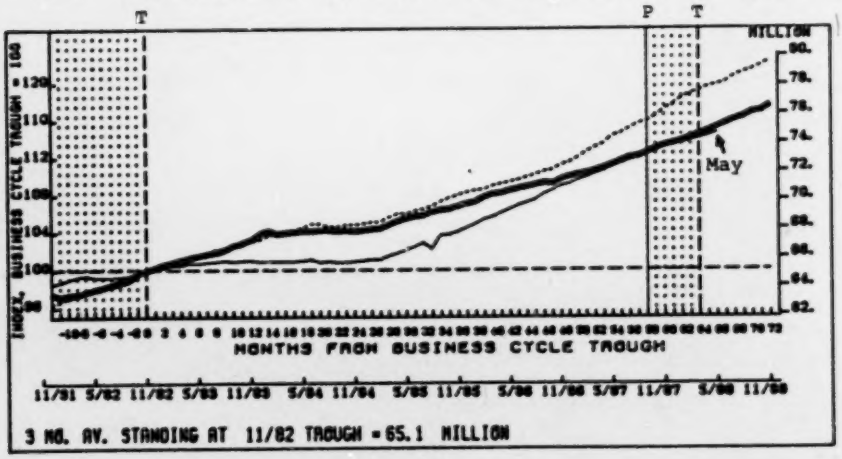
25. NONFARM EMPLOYEE HOURS



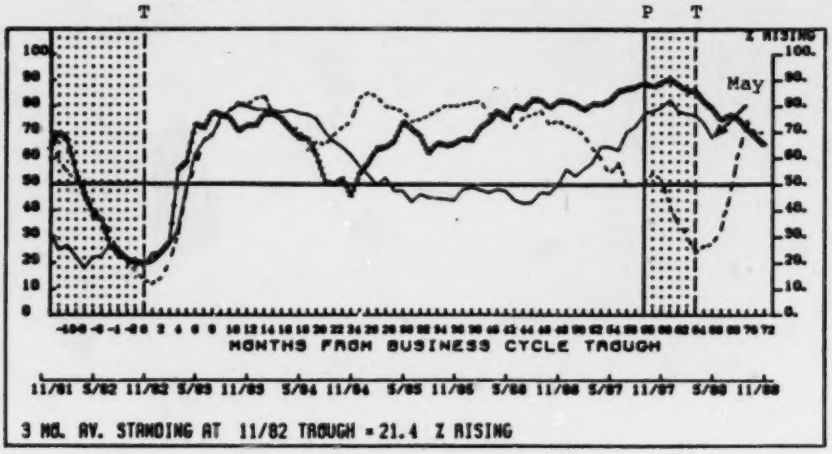
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES



27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES

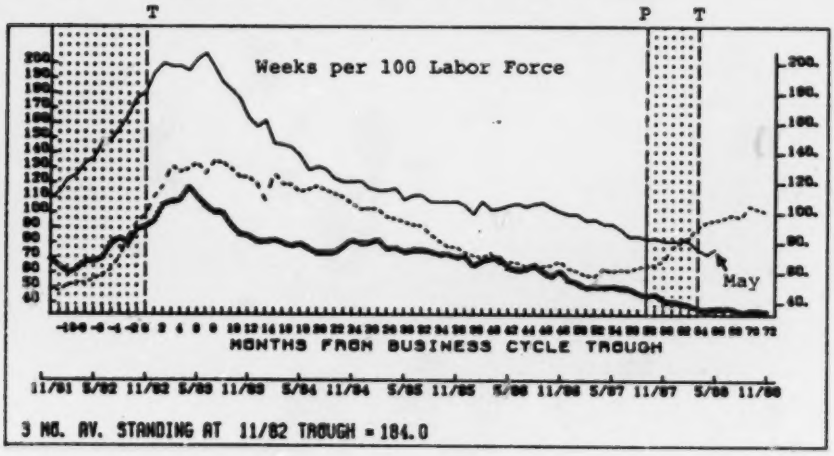


28. EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES

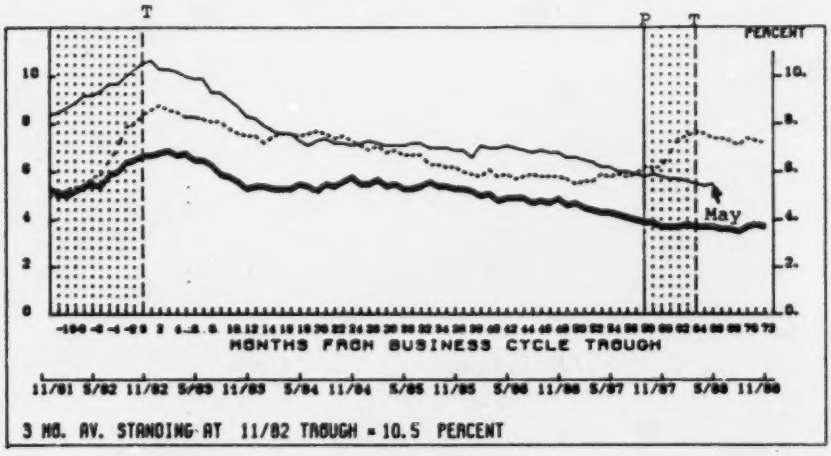

T
P
T
% RISING
May
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 21.4 % RISING

Declining from a very high level.

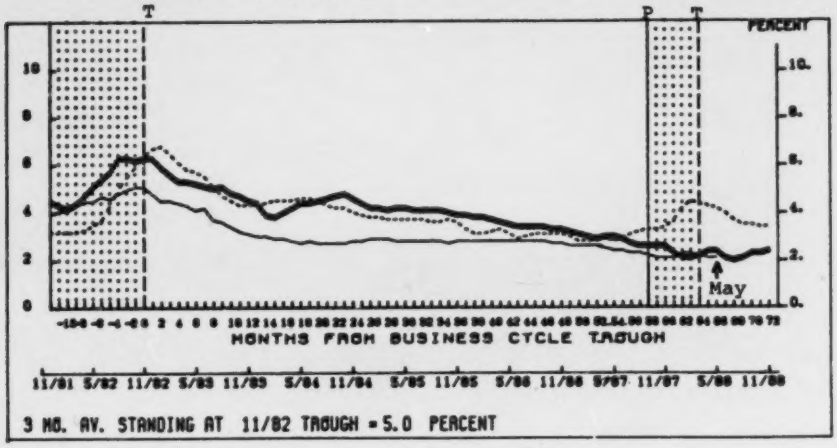
29. UNEMPLOYMENT SEVERITY INDEX


T
P
T
Weeks per 100 Labor Force
May
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 184.0

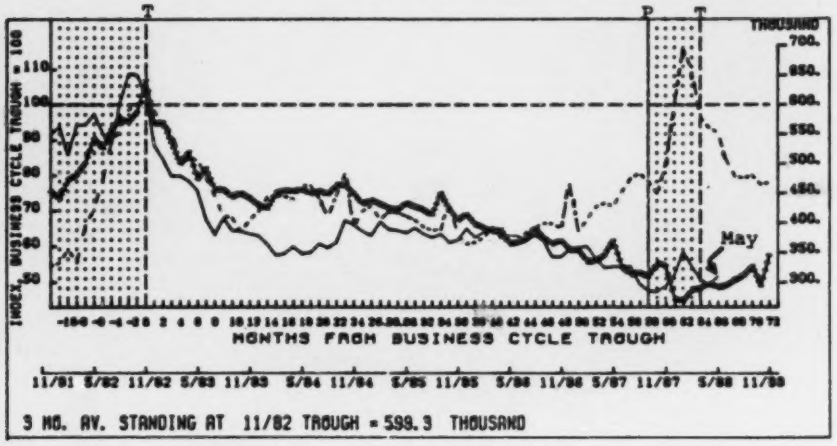
30. UNEMPLOYMENT RATE: TOTAL


T
P
T
PERCENT
May
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 10.5 PERCENT

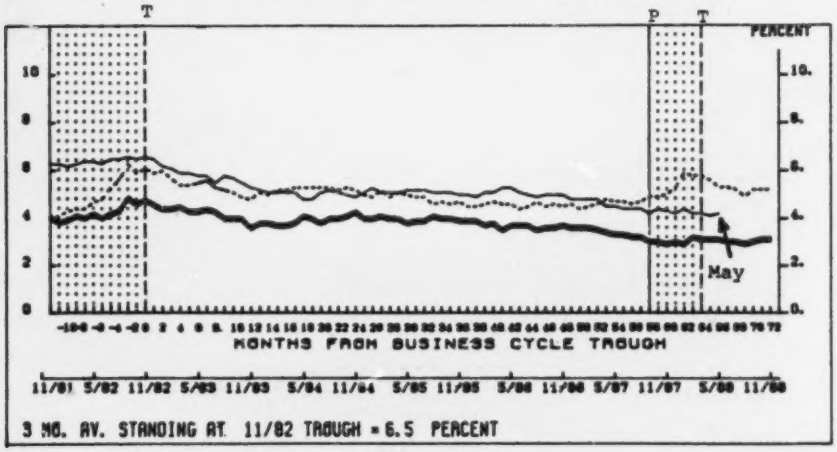
31. UNEMPLOYMENT RATE: INSURED


T
P
T
PERCENT
May
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 5.0 PERCENT

32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE

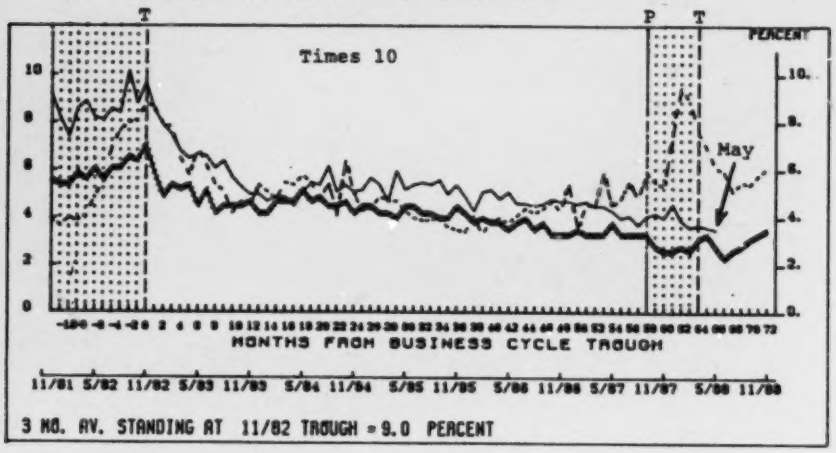

T
P
T
THOUSAND
INDEX, BUSINESS CYCLE TROUGH = 100
May
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 599.3 THOUSAND

33. SHORT-DURATION UNEMPLOYMENT RATE

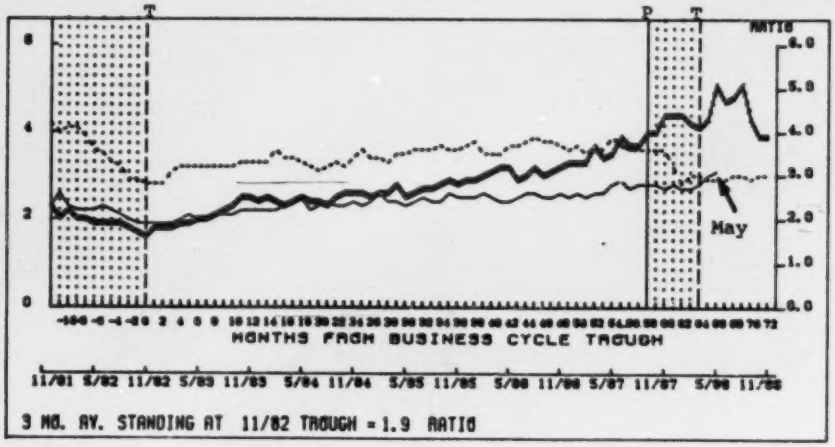

T
P
T
PERCENT
May
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 6.5 PERCENT

OTHER LEADING EMPLOYMENT INDICATORS

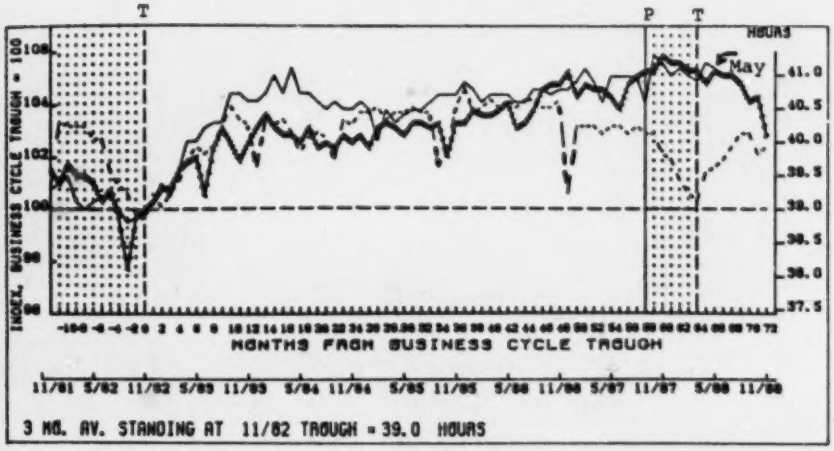
34. LAYOFF RATE UNDER 5 WEEKS



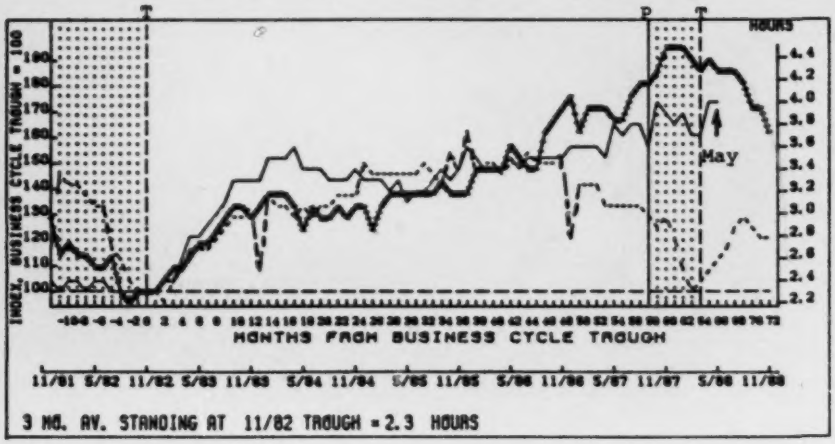
35. VOLUNTARY TO INVOLUNTARY PART-TIME EMPLOYMENT RATIO



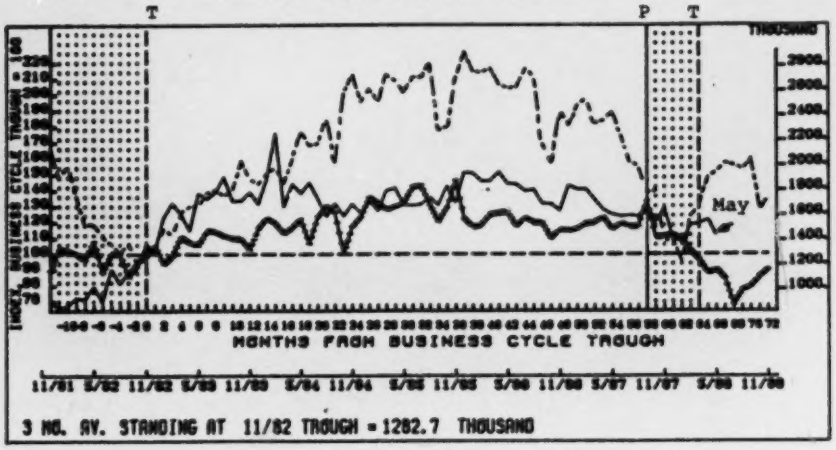
36. AVERAGE WORKWEEK, MANUFACTURING



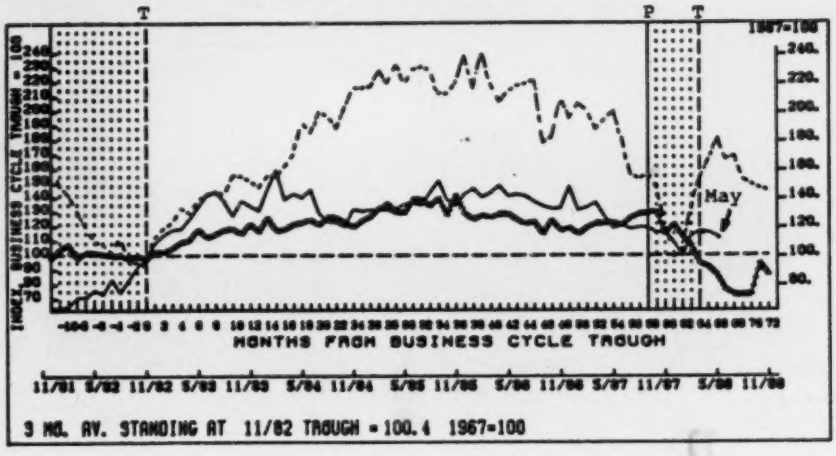
37. OVERTIME HOURS, MANUFACTURING


T
P
T
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
May
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2.3 HOURS

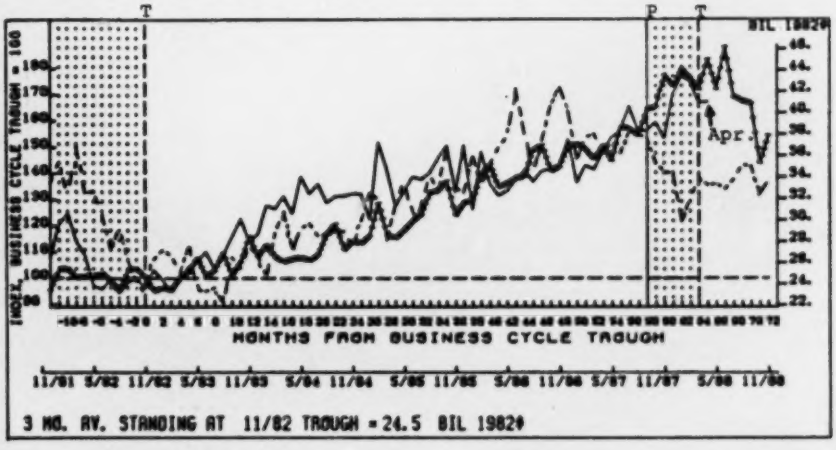
38. NEW PRIVATE HOUSING STARTS



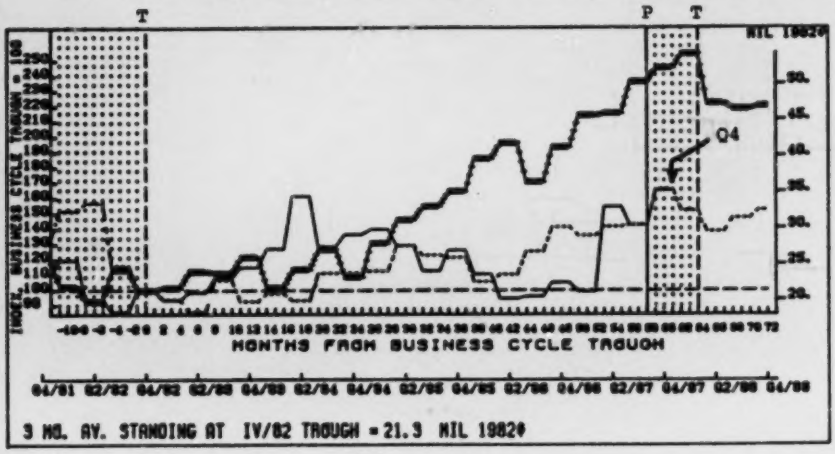
39. NEW PRIVATE HOUSING PERMITS



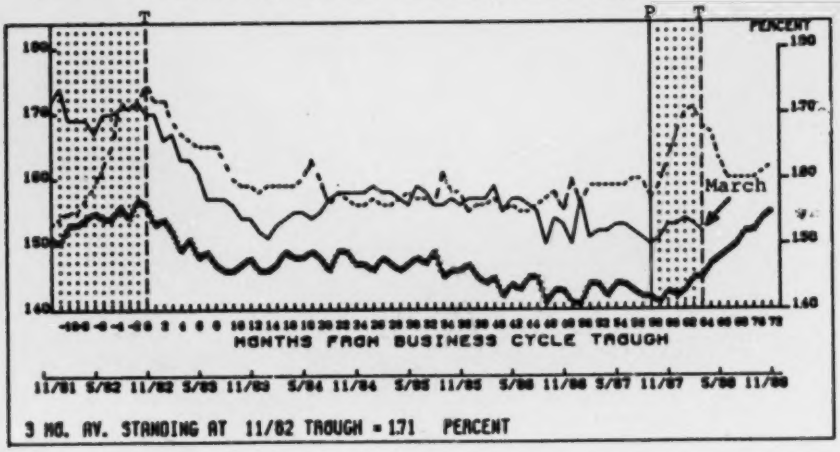
40. CONTRACTS & ORDERS, PLANT & EQUIPMENT



41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING

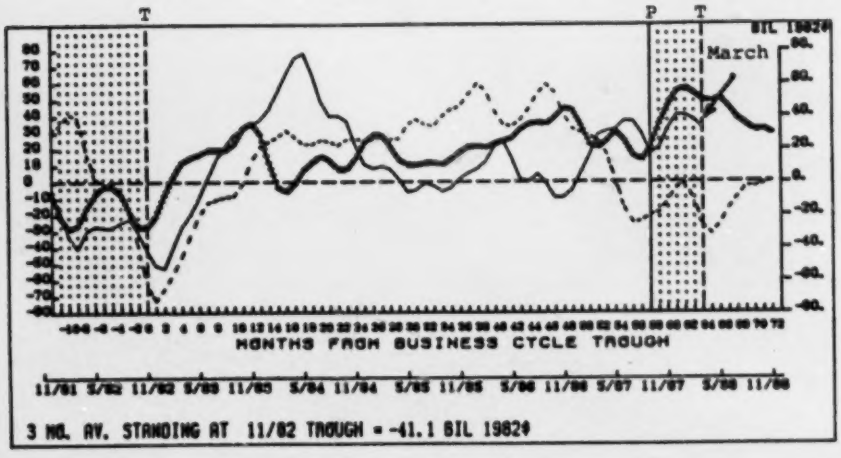


42. INVENTORY/SALES RATIO, MANUFACTURING AND TRADE

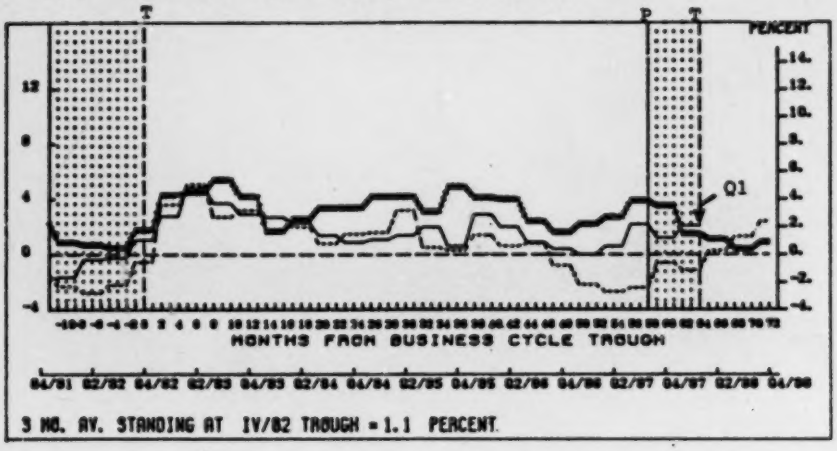


Inventories aren't a problem.

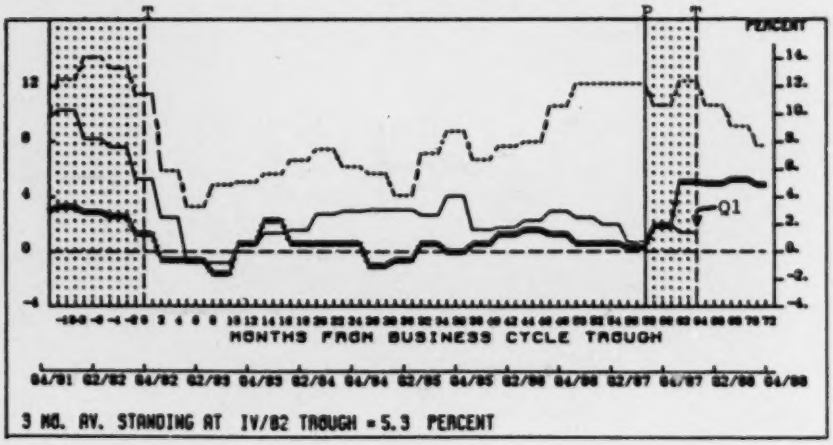
43. CHANGE IN INVENTORY ON HAND & ON ORDER



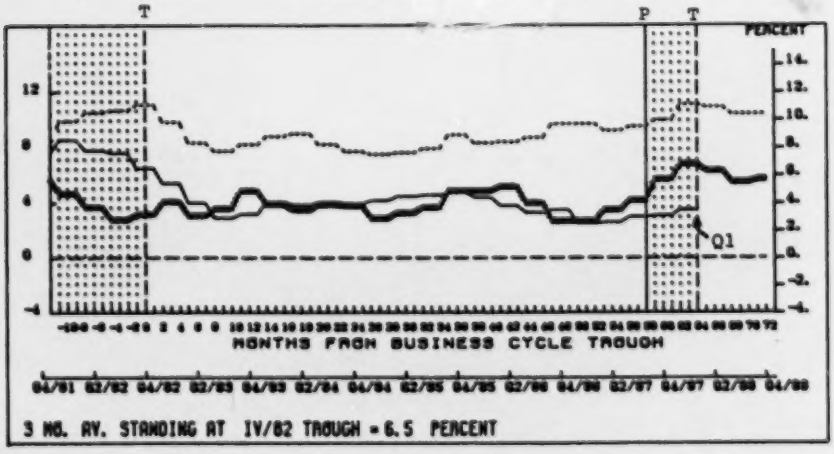
44. OUTPUT PER HOUR, GROWTH RATE



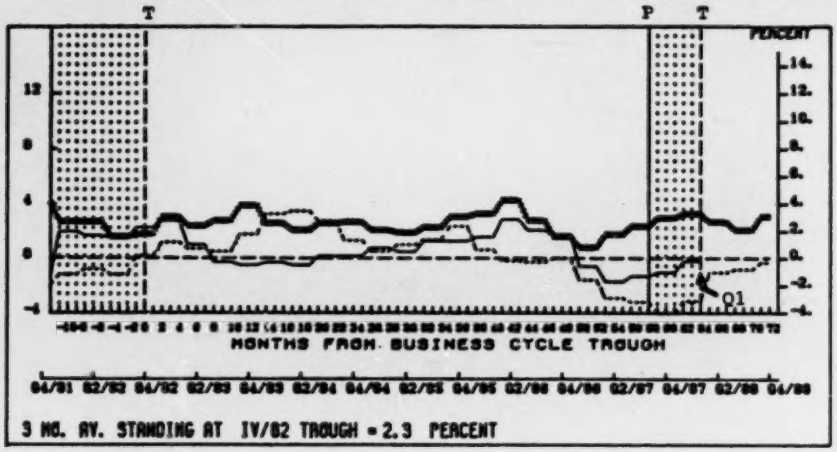
45. UNIT LABOR COSTS, GROWTH RATE



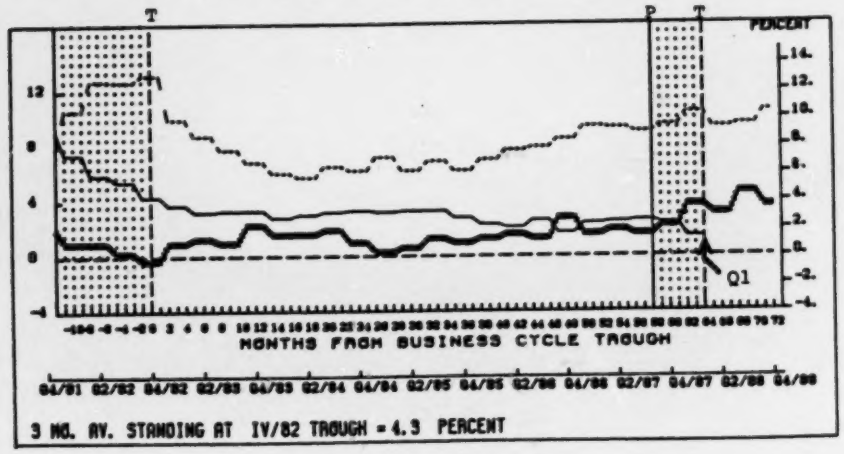
46. HOURLY COMPENSATION, GROWTH RATE



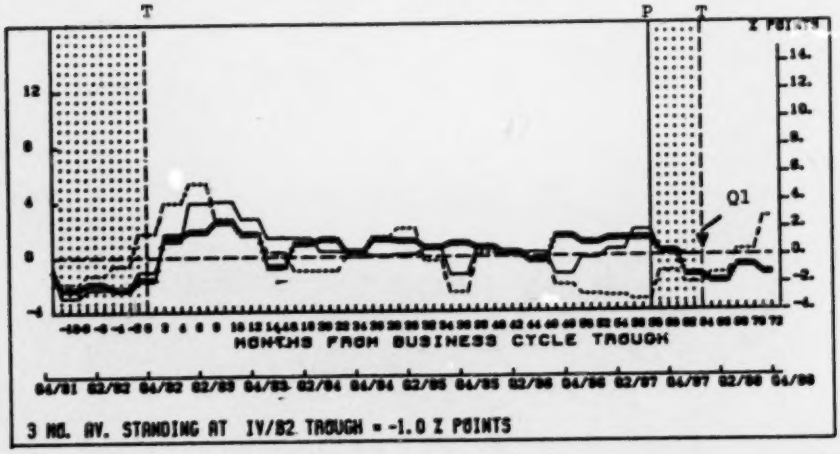
47. REAL HOURLY COMPENSATION, GROWTH RATE



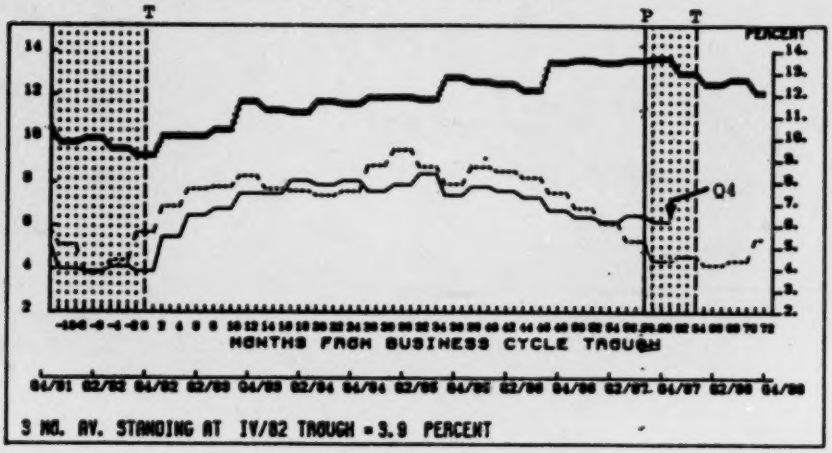
48. SELLING PRICE INDEX, GROWTH RATE



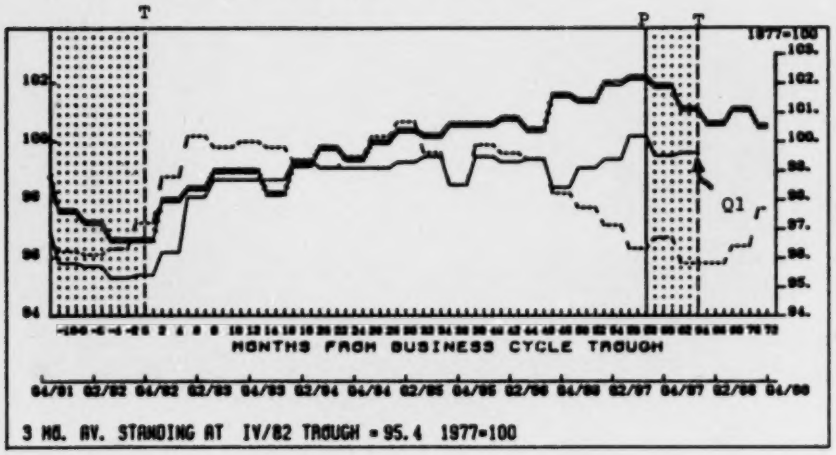
49. GROWTH RATE IN PRICES MINUS GROWTH RATE IN COSTS



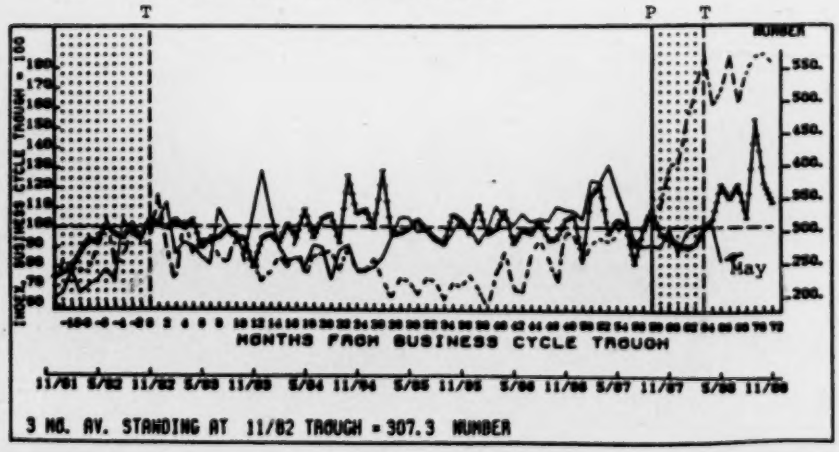
50. CORPORATE PROFIT MARGIN



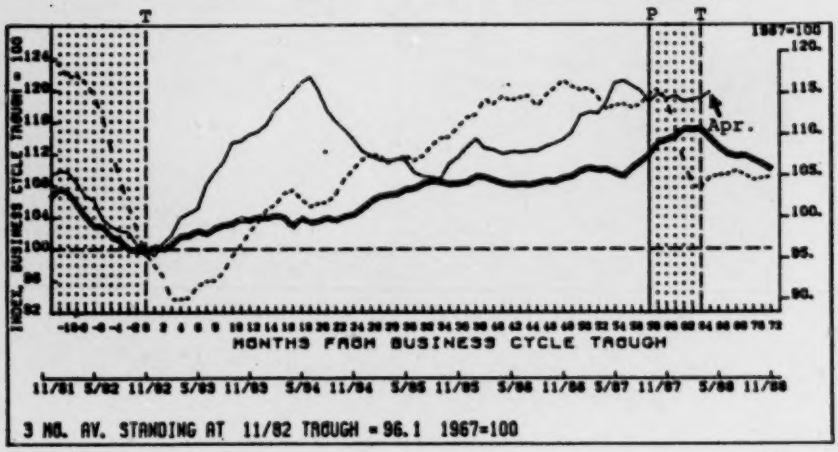
51. PRICE/LABOR COST RATIO



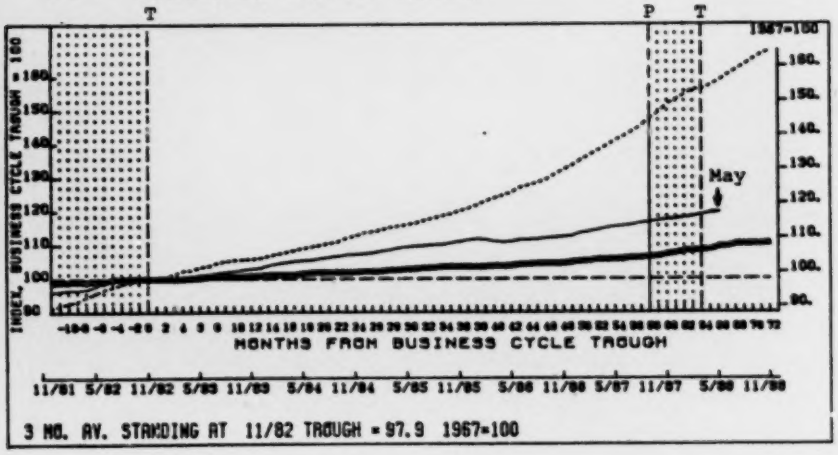
52. LARGE BUSINESS FAILURES



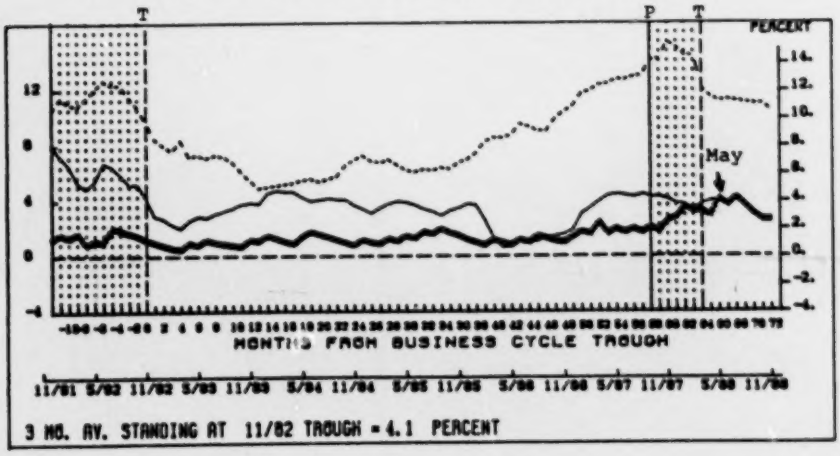
53. LEADING INDEX OF INFLATION (CIBCR)



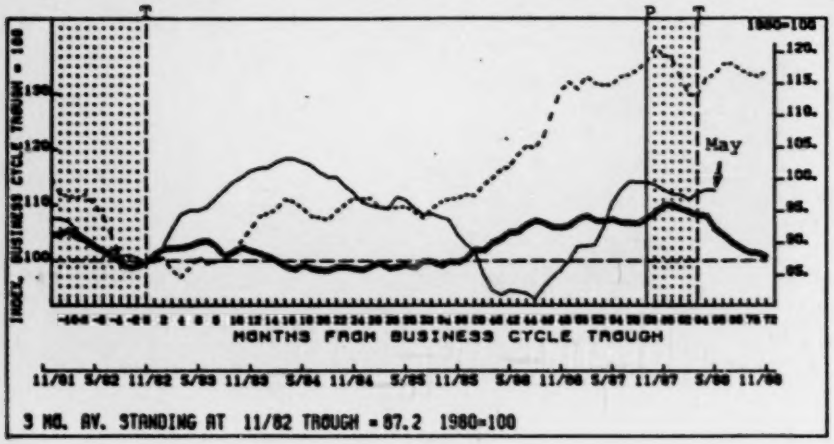
54. CONSUMER PRICE INDEX



55. CONSUMER PRICE INDEX, GROWTH RATE

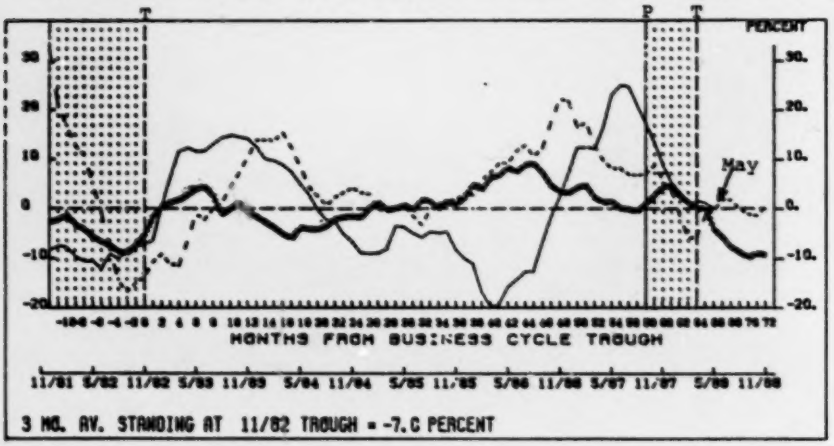


56. INDUSTRIAL MATERIALS PRICE INDEX

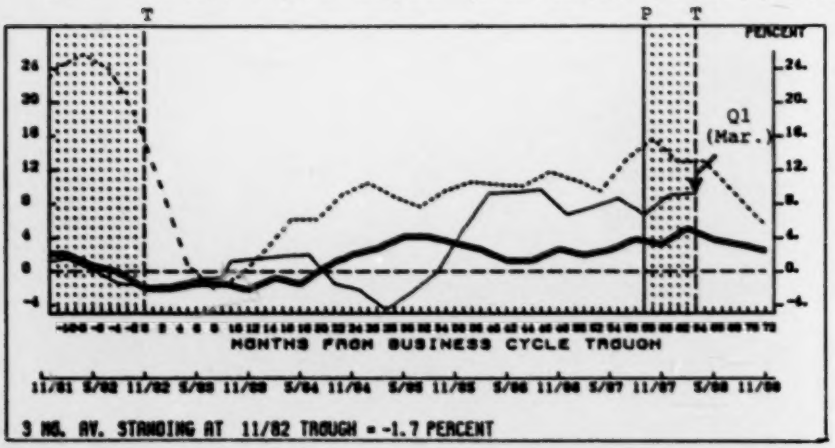

INDEX, BUSINESS CYCLE TROUGH = 100
1980=100
May
MONTHS FROM BUSINESS CYCLE TROUGH
3 MO. AV. STANDING AT 11/82 TROUGH = 87.2 1980=100

On June 22, the month-to-date average was around 101 - a significant increase from May.

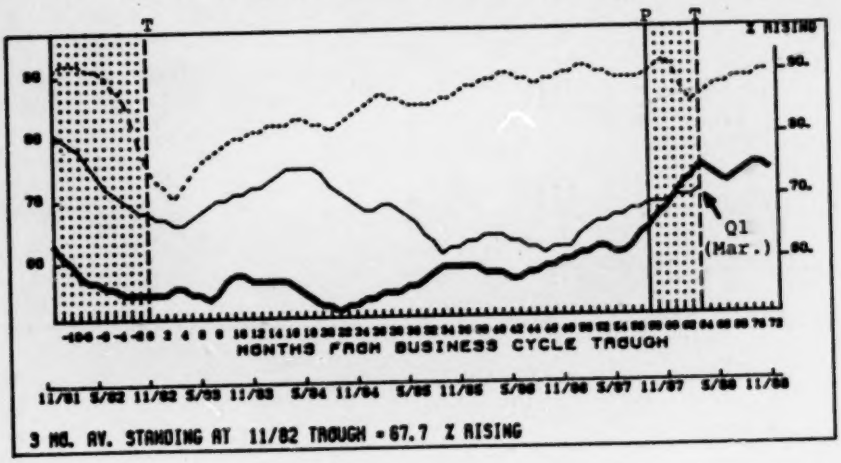
57. INDUSTRIAL MATERIALS PRICE INDEX, GROWTH RATE



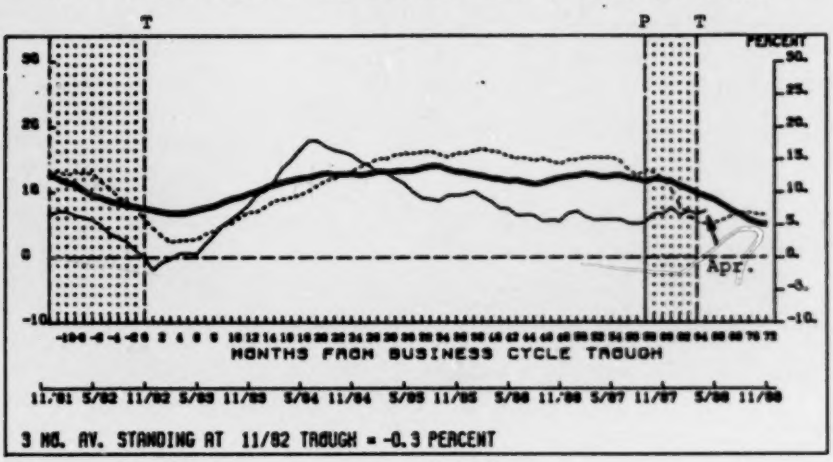
58. IMPORT PRICE INDEX (EXCLUDING FUELS), GROWTH RATE



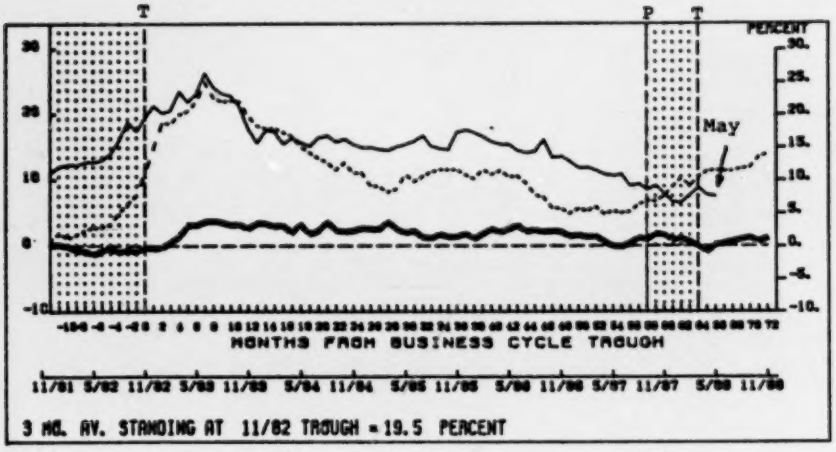
59. BUSINESSMEN'S ANTICIPATED SELLING PRICES (SURVEY)



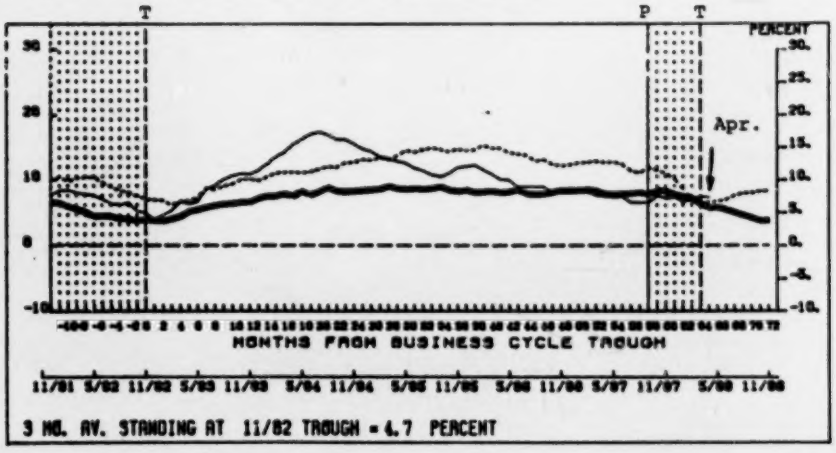
60. BUSINESS & CONSUMER DEBT, GROWTH RATE



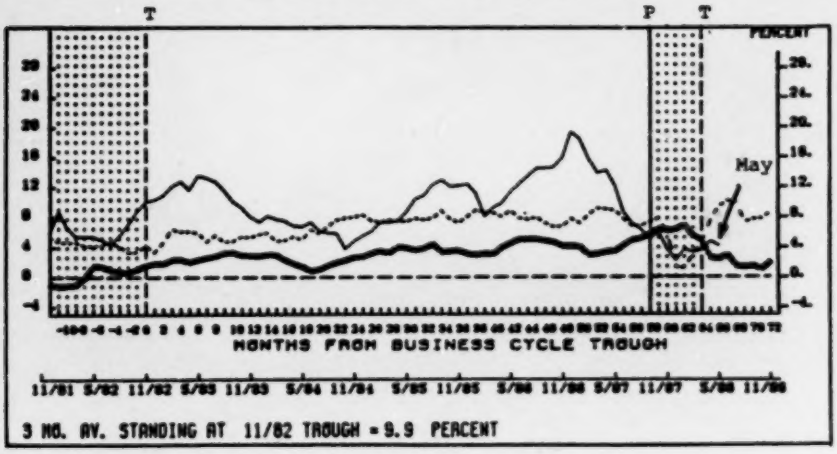
61. FEDERAL DEBT, GROWTH RATE



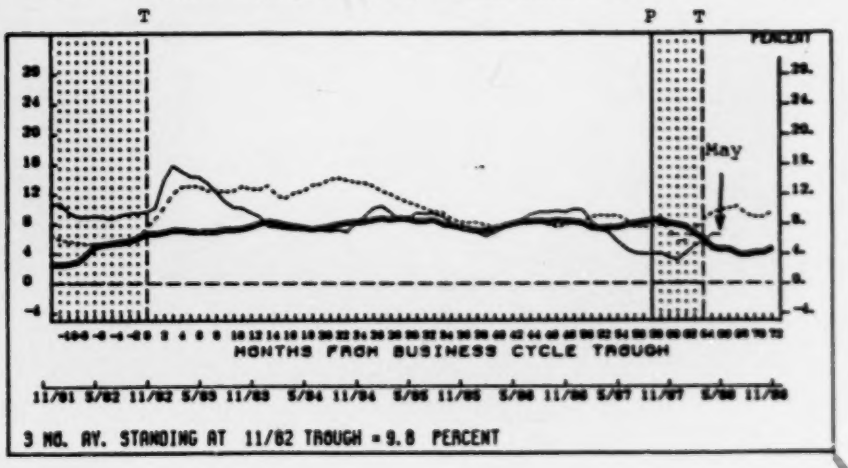
62. TOTAL DEBT, GROWTH RATE



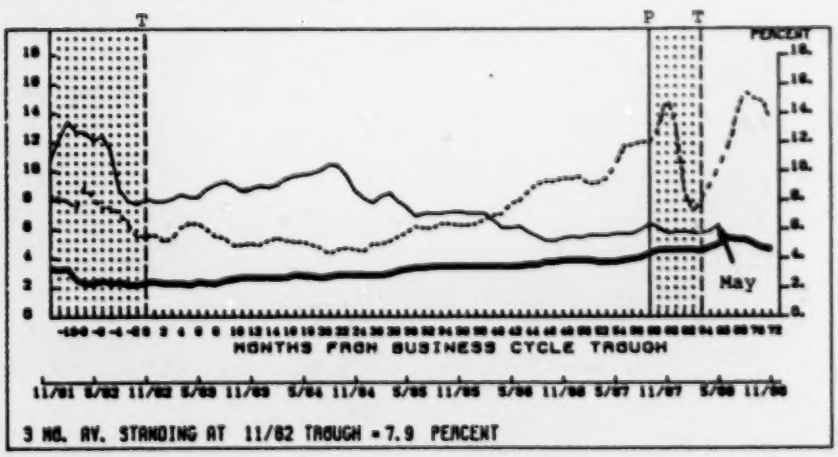
63. MONEY SUPPLY (M1), GROWTH RATE



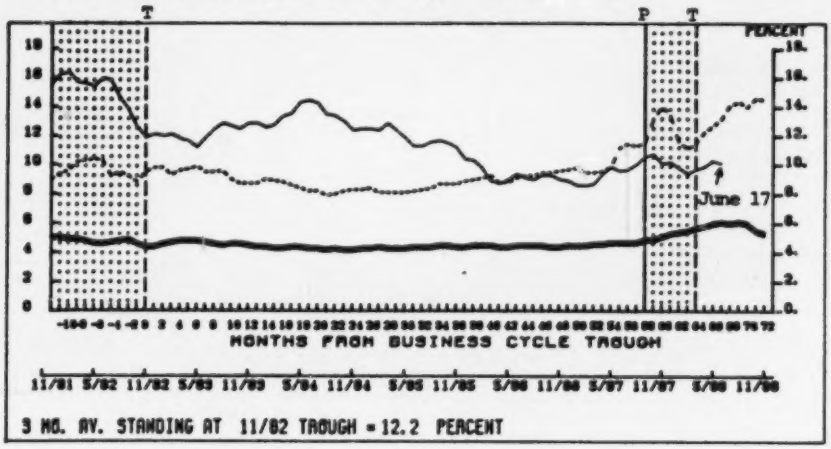
64. MONEY SUPPLY (M2), GROWTH RATE



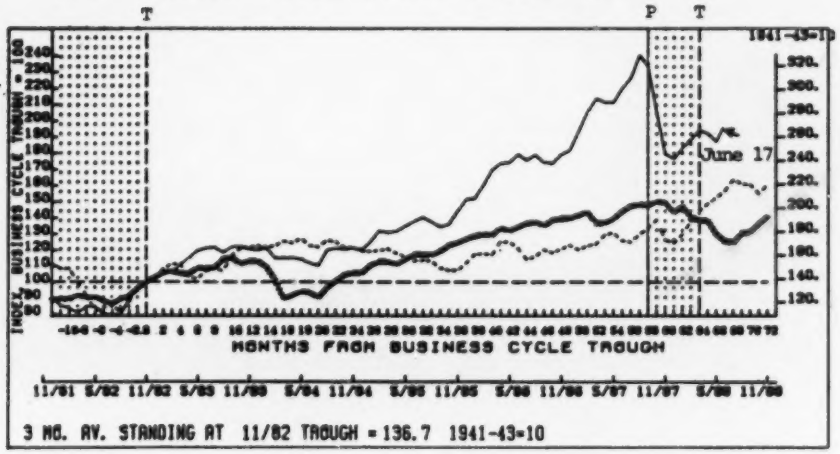
65. TREASURY BILL RATE (3-MONTH)



66. NEW CORPORATE BOND YIELD (AA)



67. COMMON STOCK PRICE INDEX (S&P 500)



ABOUT THE CENTER FOR INTERNATIONAL BUSINESS CYCLE RESEARCH

The Center for International Business Cycle Research (CIBCR), established in 1979, specializes in the study of trends and fluctuations in economic growth and inflation in the United States and other countries. The analysis contained in this report is the result of its ongoing research programs on U.S. business cycles. Readers are invited to submit comments and suggestions concerning this publication. In addition, readers wishing to secure data compiled by the Center on the eight other major industrial countries or copies of research reports may do so by communicating with:

Center for International Business Cycle Research
Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

Other CIBCR publications include International Economic Indicators, a monthly 70-page data compilation on leading and coincident indicators for nine industrial countries. Monthly press releases are issued on a leading index of inflation and a leading employment index for the United States.

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RECESSION - RECOVERY WATCH...

**A Bimonthly Report
Designed to Assist in the Evaluation
of Current Business Conditions**

Published by the Center for International Business Cycle Research,
Columbia Business School, Columbia University, New York, NY 10027

Dr. Geoffrey H. Moore
Director

Vol. 10, No. 4
August 1988

Summary

No recession has appeared since last October's stock market crash, and inflation now seems to be the bigger threat. Production and employment has continued to grow. The leading indexes are rather divided on whether real economic growth will slow down or speed up moderately, but none point to recession. Meanwhile, the leading inflation index posted a new high in June and only partially retracted this warning in July, indicating that the inflation rate is more likely to rise than to fall.

Reviewing the Leaders

One of the lessons of the dramatic drop in stock prices and its sequel is that it is essential to base forecasts on more than one leading indicator. Stock prices have had a long and distinguished record as a leading indicator, both in this country and abroad, and have been included in virtually all lists of leading indicators since such lists were first established fifty years ago. But stock prices have never been an infallible guide, even when they move violently. That is why composite indexes of leading indicators have been constructed. Although such indexes are not infallible either, they have a better record and supply more information than any of their components.

The Center's leading employment index does not include stock prices since it is based entirely on labor market statistics. Its growth rate remained in the range of 4 to 7% throughout the uncertainties of last autumn and winter. The latest figure, 3.5% for August, is the lowest it's been since June 1986, and puts it about where it was before the 1966-67 slowdown (see Chart 7).

The Business Week leading index, also developed by CIBCR, which includes stock prices along with six other indicators, moved down more sharply, so that for some months it was difficult to tell whether it was signalling a recession like that in 1980 or a slowdown like 1966-67. Recently it has moved off the recession track, but has not abandoned the slowdown option (Chart 6).

One of the developments supporting the slowdown scenario is reflected in our leading index of U.S. export demand, which is a composite of the leading indexes of nine other countries (Chart 15). Rapid growth in exports during the past year has contributed greatly to the rise in production, and that in turn was made possible by the decline in the dollar and the favorable growth prospects in other industrial countries, especially in the Pacific. Lately the dollar has stopped declining and growth in the leading index of export demand has slowed to about 3 percent. This kind of trend was a contributing factor in the 1966-67 slowdown, as Chart 15 shows.

Another of our innovations in the leading index field attempts to anticipate trends in the growth rate of services. The services leading index includes a stock price index for 13 service industries, together with three other leading indicators (the average workweek, commercial building contracts, and a new monthly measure of profit margins). The growth rate in this leading index was clearly affected by last fall's events and suggested that the growth rate in the services coincident index would slow at least as much as it did in 1966-67 (Chart A). Although there has been a very modest slowing, the June and July figures for both the leading and coincident growth rates moved up. Two months, of course, do not make a trend, but at least the indicators for this vastly important sector of the economy are more optimistic than they were.

Finally, another leading index that has come in with an optimistic vote (before November!) is the long-leading index. Although bond prices are included in this index, stock prices are not. In addition to bonds it includes the real money supply (M2), new housing permits, and our monthly ratio of selling prices to unit labor cost in manufacturing. The long-leading index was voting with the "slowdown but no recession" group until last February, but then it reversed course and has been on the fast track ever since. Its growth rate was above 6 percent in April, May, June and July (see Chart 6A). Given its long lead-time, that is consistent with a growth rate of about 4 percent in real GNP in 1989 (year over year), but also with slower growth between now and then.

The leading inflation index seemed to have been listening to the slowdown school until June, but then it surged up, and fell back only moderately in July (Chart 53). Inflationary pressures are still something to be concerned about, as this expansion nears its sixth anniversary.

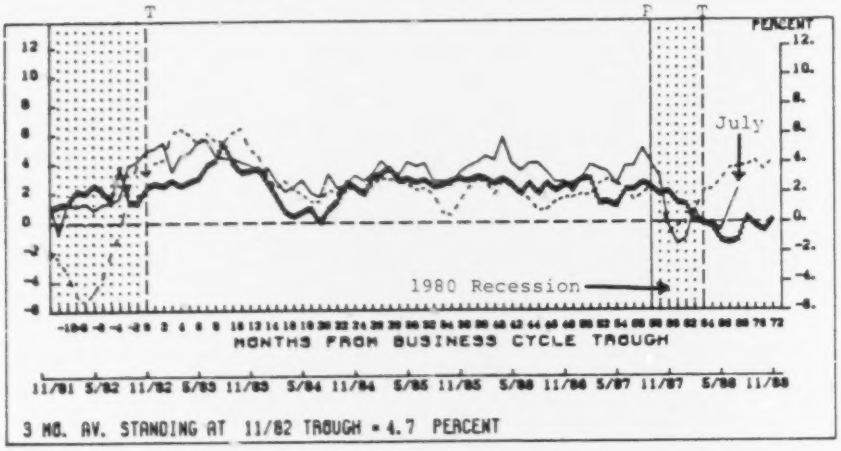
CHART A.

SERVICES LEADING AND COINCIDENT INDEXES:

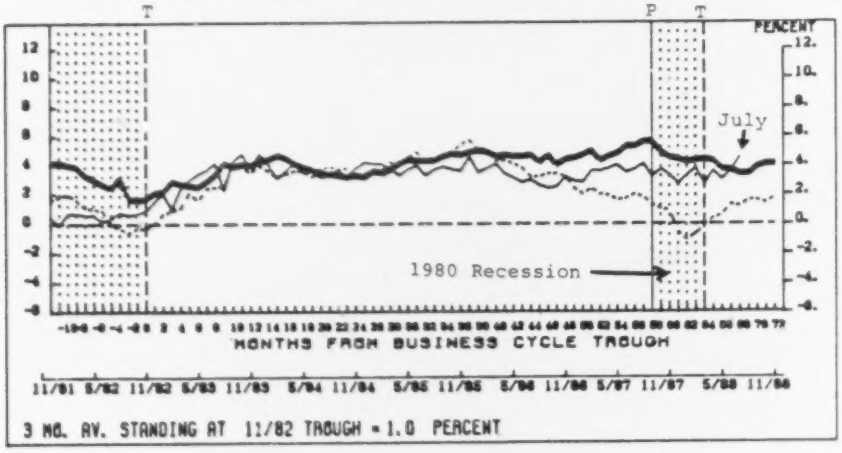
PATTERNS OF CURRENT AND PREVIOUS LONG EXPANSIONS

_____ Current expansion, 1982 to date
---------- 1975-80 expansion
_____ 1961-69 expansion

SERVICES LEADING INDEX, GROWTH RATE



SERVICES COINCIDENT INDEX, GROWTH RATE



The vertical line at zero represents the business cycle trough date, where each expansion starts. The shaded areas represent periods of contraction. The vertical line at 58 represents the business cycle peak in January of 1980. The line at 64 represents the end of the contraction or trough date of July, 1980. The growth rates are six-month smoothed percent changes at an annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

CENTER FOR INTERNATIONAL BUSINESS CYCLE RESEARCH,
COLUMBIA UNIVERSITY

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1B	N.A.P.M. Leading Index	11
2	Leading Employment Index (CIBCR)	12
3	Coincident Employment Index (CIBCR)	12
4	Leading Index (BCD 910)(L,L,L)	12
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6	Business Week Leading Index, Growth Rate (CIBCR)	14
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The series numbers of indicators that are reported in Business Conditions Digest are noted above. Readers may wish to consult the 1984 Handbook of Cyclical Indicators for further information on particular time series. The letter symbols L, C, Lg and U identify the timing classification of the series with respect to business cycles, as shown in Business Conditions Digest. L = leading, C = coincident, Lg = lagging, and U = unclassified because of inconsistency in timing. The three letters in parentheses refer to peaks, troughs and to peaks and troughs, respectively. When the series we use is similar to but not identical with the BCD series, the BCD classification has been used. In the case of growth rates, we show the classification only where a similar growth rate for the same or similar series is classified in BCD.

A GUIDE TO RECESSION-RECOVERY WATCH TABLES

As readers of Recession-Recovery Watch know, the record of previous business cycle expansions provides a guide to the future prospects of the current expansion. The idea is, of course, incorporated in the Recession-Recovery Watch pattern charts and tables.

The tables cover more than sixty indicators and give the information needed to compare the current expansion with two very long expansion since 1961. The two very long expansions are: 1961-69, (106 months) and 1975-80 (58 months). The expansions that are excluded covered the following periods: 1949-53, 45 months; 1954-57, 39 months; 1958-60, 24 months; 1970-73, 36 months; 1980-81, 12 months.

Series that are expressed as growth rates, changes, or ratios appear as actual values (Table 1) and as differences from business percentages of business cycle trough standings (Table 3). All other series are expressed as percentages of business cycle trough standings (Table 2). The standing is a three month average centered on the trough month. In the case of quarterly series the trough standing is the figure for the business cycle trough quarter. The monthly and quarterly trough dates are those established by the National Bureau of Economic Research.

TABLE 1

RECESSION-RECOVERY STATUS UP TO 68 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Actual Levels

		UNIT	Months After Business cycle Trough	Expansions Starting Feb. 1961	Expansions Starting Mar. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	68	-10.8	0.3	0.6	JUL
6A.	LONG LEADING INDEX, GROWTH RATE	%	68	-9.1	2.3	5.4	JUL
6B.	N.A.P.M. INDEX, GROWTH RATE	%	68	3.0	0.9	5.8	JUL
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	68	5.1	5.9	4.0	JUL
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	68	7.9	-0.6	6.6	JUL
9.	LEADING INDEX, GROWTH RATE.	%	68	-4.9	7.7	0.6	JUL
10.	COINCIDENT INDEX, GROWTH RATE	%	68	6.4	-0.2	5.4	JUL
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	67	46.0	42.0	52.0	JUN
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	68	100.6	121.0	121.4	JUL
15.	NINE-COUNTRY LEADING INDEX, GROWTH RATE	%	66	1.5	-4.9	2.8	MAY
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	220	4.5	-2.0	4.0	Q2
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	68	57.9	59.4	62.6	JUL
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	67	74.3	33.0	68.4	JUN
29.	UNEMPL. SEVERITY INDEX	WEEKS PER 100 IN LABOR FORCE	68	37.1	99.3	73.4	JUL
30.	UNEMPLOYMENT RATE: TOTAL	%	68	3.6	7.3	5.4	JUL
31.	UNEMPLOYMENT RATE: INSURED	%	68	2.0	3.7	2.1	JUL
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	68	3.0	5.2	4.1	JUL
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	68	2.6	5.1	3.6	JUL
35.	PART-TIME EMPLOYMENT RATIO	%	68	4.8	3.0	2.8	JUL
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO	%	66	14.8	16.3	15.4	MAY
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	66	51.3	-25.2	19.4	MAY
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	220	1.1	0.3	0.9	Q2
45.	UNIT LABOR COSTS, GROWTH RATE	%	220	5.0	10.6	3.5	Q2
46.	HOURLY COMPENSATION, GROWTH RATE	%	220	6.3	10.9	4.5	Q2
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	220	2.7	-1.0	0.3	Q2
48.	SELLING PRICE INDEX, GROWTH RATE	%	220	3.1	9.3	2.3	Q2
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	220	-1.9	-1.3	-1.2	Q2
50.	CORPORATE PROFIT MARGIN	%	210	13.0	4.6	6.6	Q1
51.	PRICE/LABOR COST RATIO	1977=100	220	100.6	95.8	98.7	Q2
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	68	4.3	11.2	4.3	JUL
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	68	-7.7	1.9	1.7	JUL
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	67	3.6	10.8	9.4	Q2(JUN)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	67	72.0	88.0	72.0	Q2(JUN)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	67	8.0	5.7	8.5	JUN
61.	FEDERAL DEBT, GROWTH RATE	%	68	0.7	11.5	8.7	JUL
62.	TOTAL DEBT, GROWTH RATE	%	67	5.4	7.0	8.5	JUN
63.	MONEY SUPPLY (M1), GROWTH RATE	%	68	1.5	10.0	6.0	JUL
64.	MONEY SUPPLY (M2), GROWTH RATE	%	68	4.0	10.4	6.0	JUL
65.	TREASURY BILL RATE (3-MONTH)	%	68	5.4	13.7	6.7	JUL
66.	NEW CORPORATE BOND YIELD (AA)	%	68	6.0	14.1	10.1	JUL

TABLE 2

RECESSION-RECOVERY STATUS UP TO 68 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Percentage Change from Trough Levels

	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I. Composite Indexes					
1. BUSINESS WEEK LEADING INDEX (CIBCR)	68	21.0	24.9	44.8	JUL
1A. LONG LEADING INDEX (CIBCR)	68	42.1	15.1	60.2	JUL
1B. N.A.P.M. INDEX	68	41.8	24.8	32.8	JUL
2. LEADING EMPLOYMENT INDEX (CIBCR)	68	43.0	28.0	39.3	JUL
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)	68	45.4	37.5	48.3	JUL
4. LEADING INDEX (BCD)	68	34.9	31.8	37.6	JUL
5. COINCIDENT INDEX (BCD)	68	46.6	27.9	34.8	JUL
12. LAGGING INDEX (BCD)	68	27.9	2.1	22.2	JUL
14. NINE-COUNTRY LEADING INDEX (CIBCR)	66	9.4	22.7	36.5	MAY
II. Output, Income and Sales					
16. REAL GNP	220	32.7	19.5	26.2	Q2
18. INDUSTRIAL PRODUCTION INDEX	68	58.7	33.8	37.0	JUL
19. REAL PERSONAL INCOME	67	31.4	20.1	21.4	JUN
20. REAL CONSUMER EXPENDITURES	67	30.0	19.5	24.8	JUN
21. REAL RETAIL SALES	67	31.9	17.0	28.6	JUN
III. Employment and Unemployment					
22. TOTAL EMPLOYMENT	68	11.8	16.4	15.8	JUL
24. NONFARM EMPLOYMENT	68	20.9	18.4	19.8	JUL
25. NONFARM EMPLOYEE-HOURS	68	21.0	16.4	20.4	JUL
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES.	68	19.1	13.2	11.7	JUL
27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES	68	21.9	20.6	22.7	JUL
32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE	68	-49.3	-20.3	-45.4	JUL
36. AVERAGE WORKWEEK, MANUFACTURING	68	5.1	2.4	5.4	JUL
37. OVERTIME HOURS, MANUFACTURING	68	85.7	25.0	69.6	JUL
IV. Investment Commitments and Inventories					
38. NEW PRIVATE HOUSING STARTS	68	-32.0	56.1	16.1	JUL
39. NEW PRIVATE HOUSING PERMITS	68	-27.2	68.8	12.3	JUL
40. CONTRACT & ORDERS, PLANT & EQUIPMENT	67	88.4	34.2	75.1	JUN
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING	210	154.6	51.9	55.6	Q1
V. Productivity, Wages, Costs, Prices and Profits					
52. LARGE BUSINESS FAILURES	68	21.5	62.2	-18.7	JUL
53. LEADING INDEX OF INFLATION (CIBCR)	68	11.7	9.9	20.7	JUL
54. CONSUMER PRICE INDEX, ALL URBAN CONSUMERS	68	10.4	62.2	21.0	JUL
56. INDUSTRIAL MATERIALS PRICE INDEX	68	3.3	35.5	14.1	JUL
VI. Money, Credit, Interest Rates and Stock Prices					
67. STOCK PRICE INDEX (S&P 500)	68	24.4	63.7	96.8	JUL

TABLE 3

RECESSION-RECOVERY STATUS UP TO 68 MONTHS AFTER THE BUSINESS CYCLE TROUGH
Differences from Trough Levels

		Unit	Months After Business Cycle Trough	Expansions Starting FEB. 1961	Expansions Starting MAR. 1975	Current Expansion Starting Nov. 1982	Last Month or Quarter Available
I.	Composite Indexes						
6.	BUSINESS WEEK LEADING INDEX, GROWTH RATE	%	68	-17.3	5.6	-3.9	JUL
6A.	LONG LEADING INDEX, GROWTH RATE	%	68	-13.8	2.2	-10.7	JUL
6B.	N.A.P.M. INDEX, GROWTH RATE	%	68	3.1	18.0	9.0	JUL
7.	LEADING EMPLOYMENT INDEX, GROWTH RATE	%	68	7.3	15.8	3.1	JUL
8.	COINCIDENT EMPLOYMENT INDEX, GROWTH RATE	%	68	15.9	16.1	14.5	JUL
9.	LEADING INDEX, GROWTH RATE.	%	68	-6.2	21.2	-4.0	JUL
10.	COINCIDENT INDEX, GROWTH RATE	%	68	13.2	14.9	12.2	JUL
11.	DIFFUSION INDEX OF LEADING INDICATORS	% RISING	67	9.3	24.3	5.3	JUN
13.	RATIO, COINCIDENT TO LAGGING INDEX	1967=100	68	12.8	24.3	11.3	JUL
15.	NINE-COUNTRY LEADING INDEX, GROWTH RATE	%	66	-2.1	7.0	3.0	MAY
II.	Output, Income and Sales						
17.	REAL GNP GROWTH RATE	%	220	3.9	3.0	5.1	Q2
III.	Employment and Unemployment						
23.	EMPLOYMENT TO POPULATION RATIO	%	68	1.6	2.9	4.9	JUL
28.	EMPLOYMENT DIFFUSION INDEX, 186 INDUS.	% RISING	67	54.0	18.9	47.0	JUN
29.	UNEMPL. SEVERITY INDEX WEEKS PER 100 IN	LABOR FORCE	68	-54.5	-1.9	-110.6	JUL
30.	UNEMPLOYMENT RATE: TOTAL	%	68	-3.0	-1.0	-5.1	JUL
31.	UNEMPLOYMENT RATE: INSURED	%	68	-4.3	-2.6	-2.9	JUL
33.	SHORT-DURATION UNEMPLOYMENT RATE	%	68	-1.7	-0.8	-2.4	JUL
34.	LAYOFF RATE UNDER 5 WEEKS (TIMES 10)	%	68	-3.8	-3.4	-5.4	JUL
35.	PART-TIME EMPLOYMENT RATIO	%	68	3.1	0.1	0.9	JUL
IV.	Investment Commitments and Inventories						
42.	INVENTORY/SALES RATIO	%	66	-7.3	-9.7	-16.7	MAY
43.	CHANGE IN INVENTORIES ON HAND & ON ORDER	BIL. 82$.	66	76.2	33.0	60.5	MAY
V.	Productivity, Wages, Costs, Prices and Profits						
44.	OUTPUT PER HOUR, GROWTH RATE	%	220	-0.7	0.8	-0.2	Q2
45.	UNIT LABOR COSTS, GROWTH RATE	%	220	3.7	-0.8	-1.8	Q2
46.	HOURLY COMPENSATION, GROWTH RATE	%	220	3.1	-0.2	-2.0	Q2
47.	REAL HOURLY COMPENSATION, GROWTH RATE	%	220	0.9	-1.2	-2.0	Q2
48.	SELLING PRICE INDEX, GROWTH RATE	%	220	3.4	-3.9	-2.0	Q2
49.	GROWTH IN PRICES MINUS GROWTH IN COSTS	% POINTS	220	-0.3	-3.1	-0.2	Q2
50.	CORPORATE PROFIT MARGIN	%	210	3.8	-1.1	2.7	Q1
51.	PRICE/LABOR COST RATIO	1977=100	220	4.0	-1.3	3.3	Q2
55.	CONSUMER PRICE INDEX, GROWTH RATE	%	68	3.1	1.5	0.2	JUL
57.	INDUSTRIAL MAT. PRICE INDEX, GROWTH RATE	%	68	-3.0	15.0	8.7	JUL
58.	IMPORT PRICES EXCL. FUELS, GROWTH RATE	%	67	5.4	-4.8	11.1	Q2(JUN)
59.	ANTICIPATED SELLING PRICES (D&B SURVEY)	% RISING	67	17.0	12.3	4.3	Q2(JUN)
VI.	Money, Credit, Interest Rates and Stock Prices						
60.	BUSINESS & CONSUMER DEBT, GROWTH RATE	%	67	0.5	-0.2	8.8	JUN
61.	FEDERAL DEBT, GROWTH RATE	%	68	1.2	0.2	-10.8	JUL
62.	TOTAL DEBT, GROWTH RATE	%	67	1.6	-0.1	3.8	JUN
63.	MONEY SUPPLY (M1), GROWTH RATE	%	68	-0.1	6.3	-3.9	JUL
64.	MONEY SUPPLY (M2), GROWTH RATE	%	68	-2.5	2.9	-3.8	JUL
65.	TREASURY BILL RATE (3-MONTH)	%	68	3.0	8.2	-1.2	JUL
66.	NEW CORPORATE BOND YIELD (AA)	%	68	1.6	4.7	-2.1	JUL

HOW TO READ CHARTS

ACTUAL LEVEL CHARTS

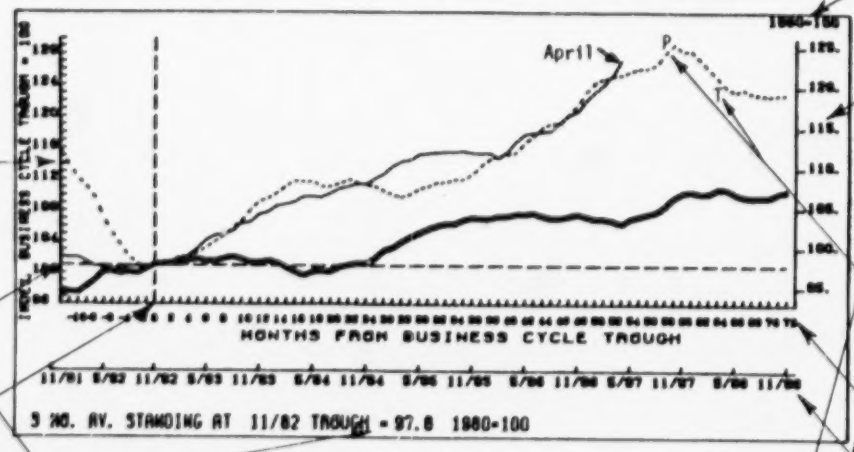
TITLE: If the title does not say "growth rate," then the chart is for the actual level, rather than the growth rate.

LEFT-HAND SCALE measures movements of both current and past expansions, relative to their standing at the respective reference troughs (i.e. for each expansion the standing at the trough equals 100). This is the common vertical scale along which the expansions are compared.

HORIZONTAL DOTTED LINE shows level at reference trough (100) for current and past expansions.

VERTICAL DOTTED LINE represents reference trough dates for current and past expansions, which are all aligned so that the reference trough dates are positioned on the vertical line.

STANDING AT THE TROUGH for the current expansion (when the expansion began) is typically calculated as the 3-month average centered on the trough month.

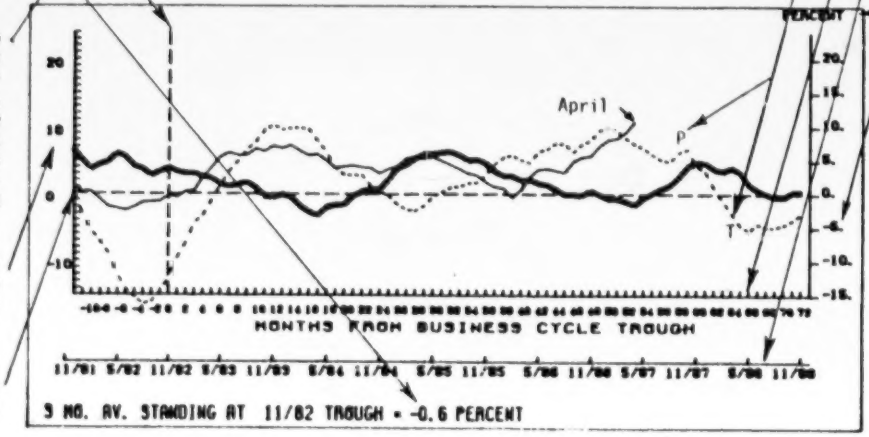


GROWTH RATE CHARTS

TITLE: If the title says "growth rate," then the chart is for the "6-month smoothed growth rate," rather than the actual level. These growth rates are obtained by dividing the current month's figure by the average for the twelve preceding months, and expressing the result as a compound annual rate.

LEFT-HAND SCALE, (same as the right-hand scale) shows growth rates in percent for both current and past expansions.

HORIZONTAL DOTTED LINE is drawn typically at 0% growth rate, a natural reference level for both current and past expansions.



UNIT for right-hand scale, which refers only to the current expansion.

RIGHT-HAND SCALE refers only to current expansion. It is a transformation of the left hand scale to show the current expansion in original units rather than with trough standing = 100.

P indicates the January 1980 PEAK, marking the start of the 1980 recession, which lasted till the July 1980 TROUGH, indicated by T.

HORIZONTAL SCALE measures months from business cycle trough for both the current and the past expansions. This is the common time scale along which the recoveries are compared.

ACTUAL DATES, referring only to the current expansion.

UNIT for both scales (percent), referring to both current and past growth rates in expansions.

RIGHT-HAND SCALE, which refers to both current and past expansions.

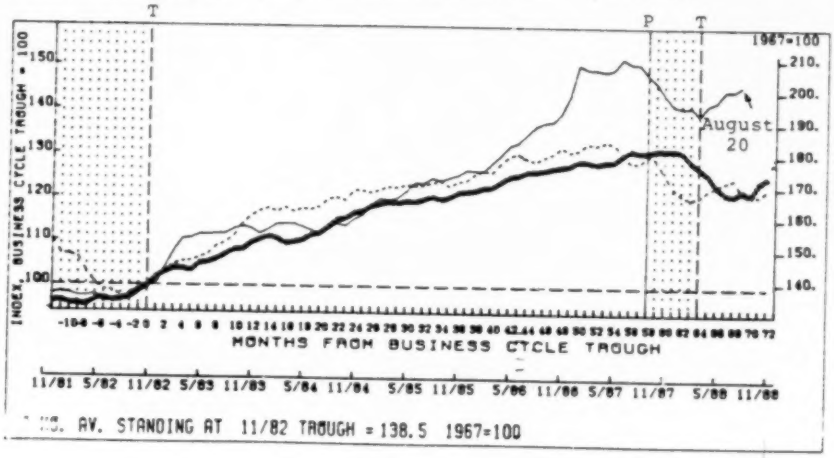
——— THICK LINE indicates 1961-69 expansion (from February 1961) which continued for 106 months.

---------- DOTTED LINE indicates the 1975-80 expansion (from Mar. 1975), which ended after 58 months, and the subsequent recession (from January 1980 to July 1980).

——— THIN LINE indicates the current expansion (business cycle trough: November 1982 or IV Q 1982).

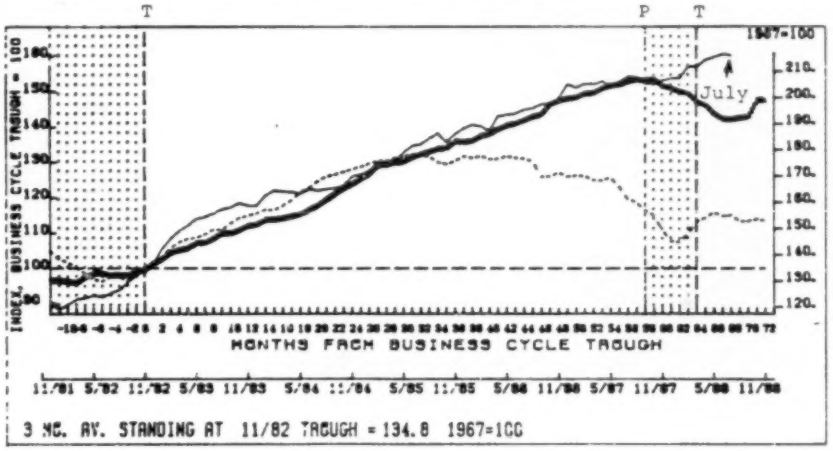
COMPOSITE INDEXES

1. BUSINESS WEEK LEADING INDEX (CIBCR)


T
P
T
1967=100
August 20
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 138.5 1967=100

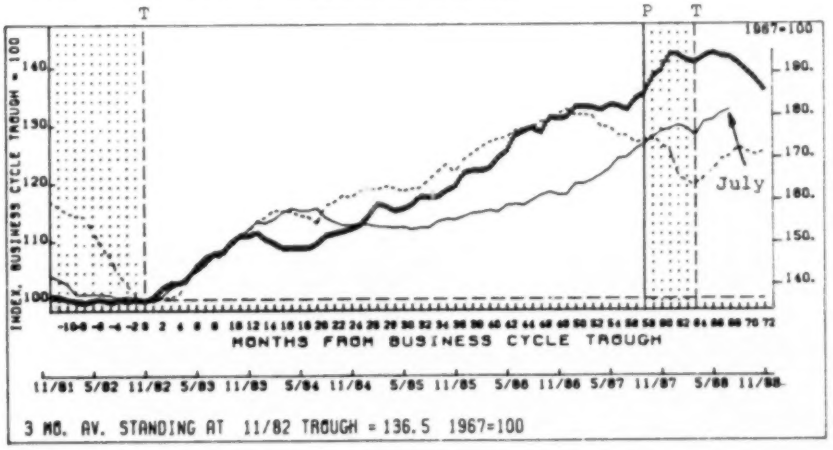
Climbing again

1A. LONG-LEADING INDEX (CIBCR)


T
P
T
1967=100
July
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 134.8 1967=100

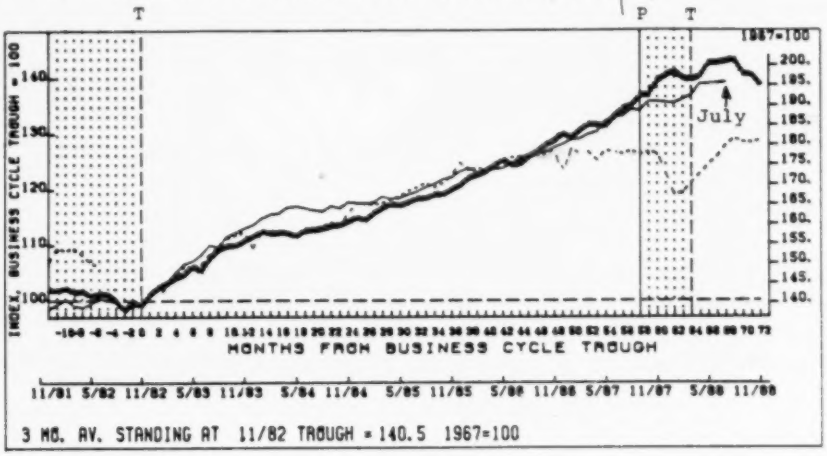
Still climbing

1B. N.A.P.M. LEADING INDEX

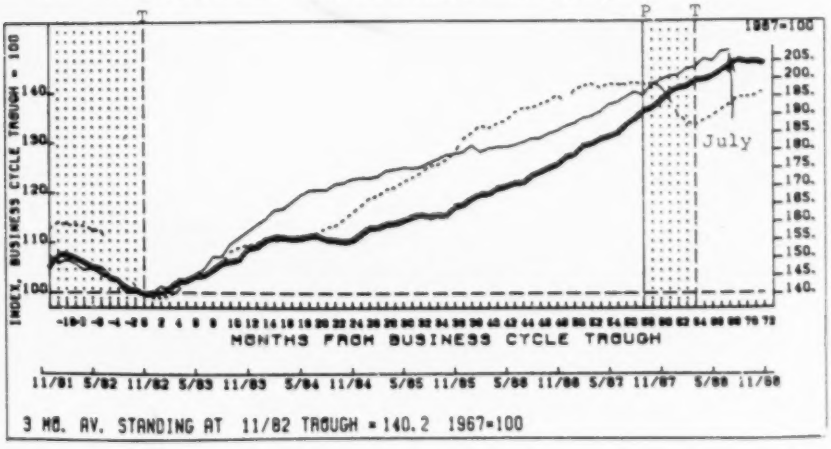

T
P
T
1967=100
July
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 136.5 1967=100

Likewise

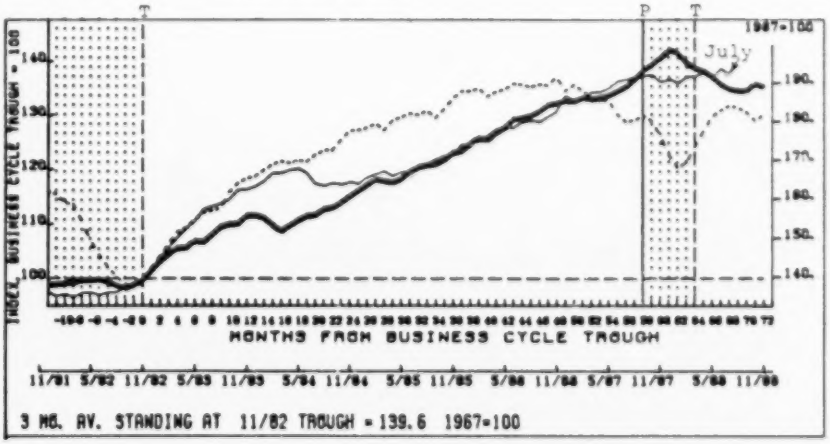
2. LEADING EMPLOYMENT INDEX (CIBCR)


T
P
T
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.5 1967=100

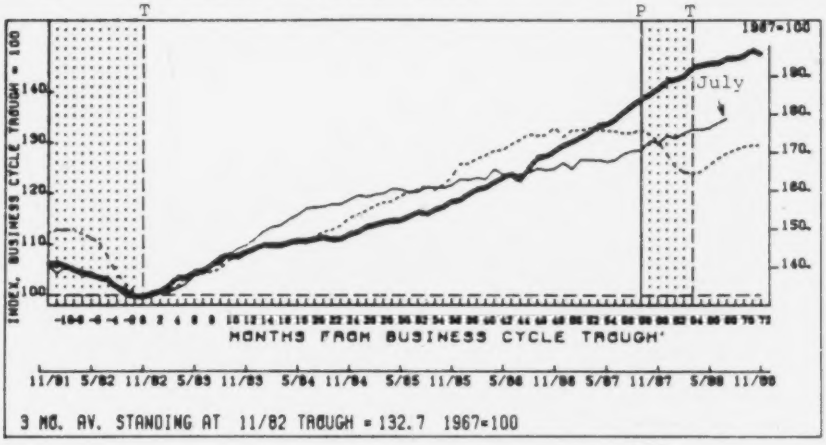
3. COINCIDENT EMPLOYMENT INDEX (CIBCR)


T
P
T
1987=100
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 140.2 1967=100

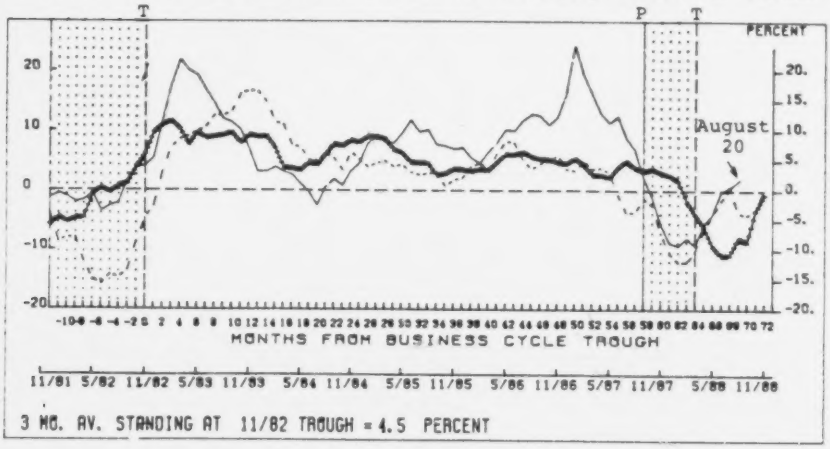
4. LEADING INDEX (BCD)



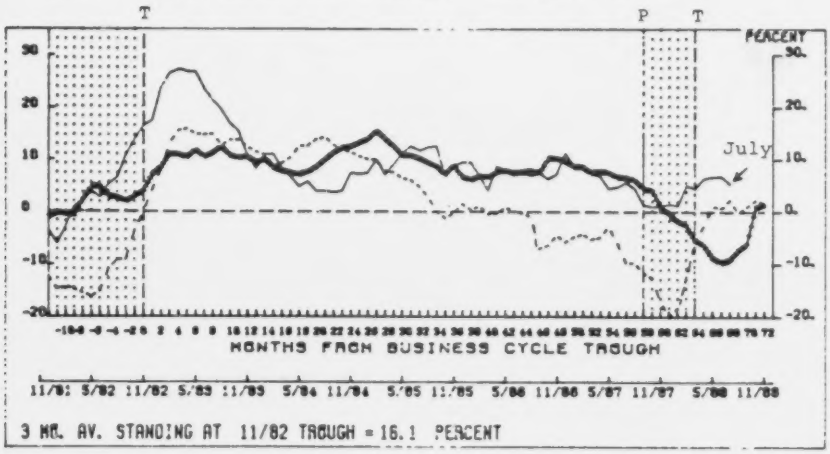
5. COINCIDENT INDEX (BCD)


T
P
T
1967=100
July
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 132.7 1967=100

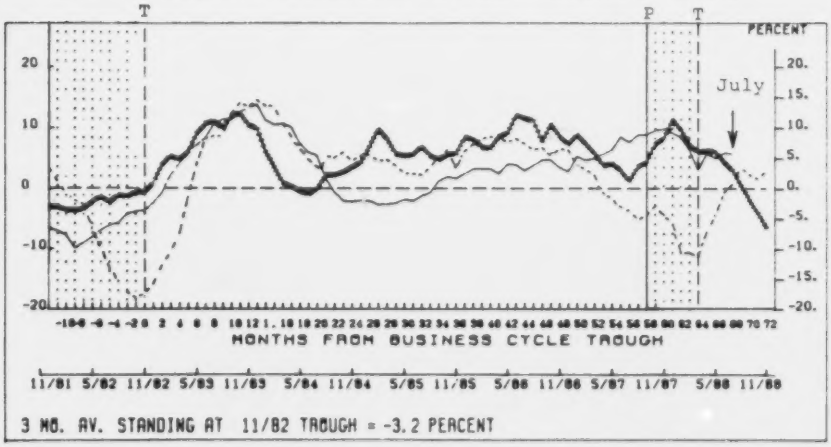
6. BUSINESS WEEK LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
August
20
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.5 PERCENT

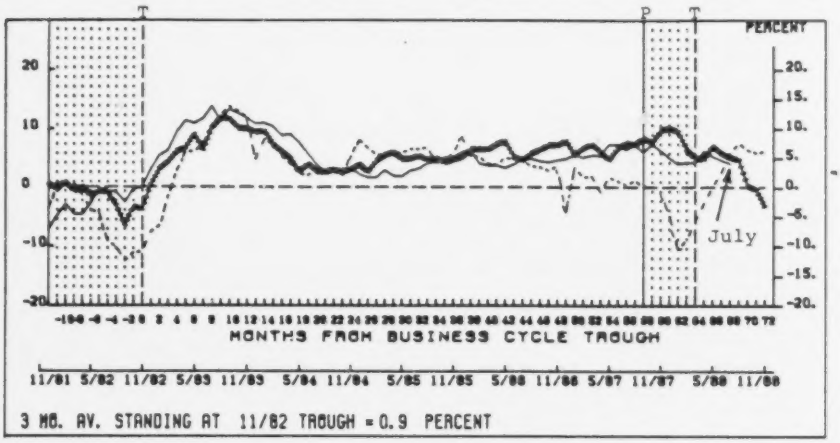
6A. LONG-LEADING INDEX, GROWTH RATE



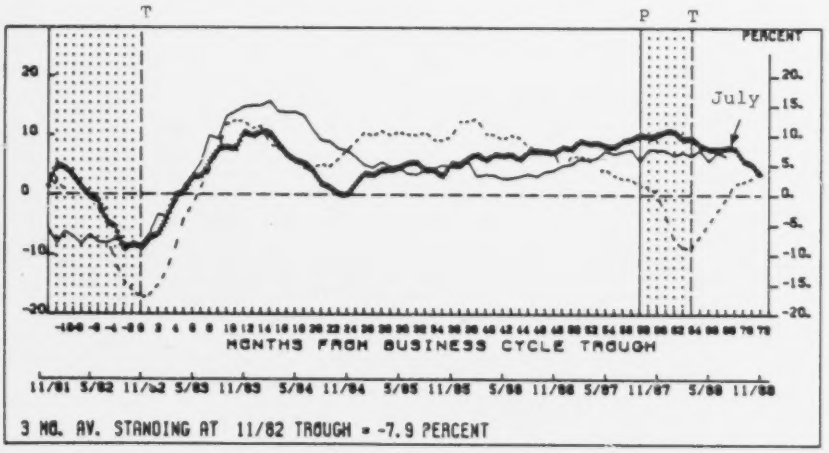
6B. N.A.P.M. LEADING INDEX, GROWTH RATE


T
P
T
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -3.2 PERCENT

7. LEADING EMPLOYMENT INDEX, GROWTH RATE


T
P
T
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 0.9 PERCENT

8. COINCIDENT EMPLOYMENT INDEX, GROWTH RATE (CIBCR)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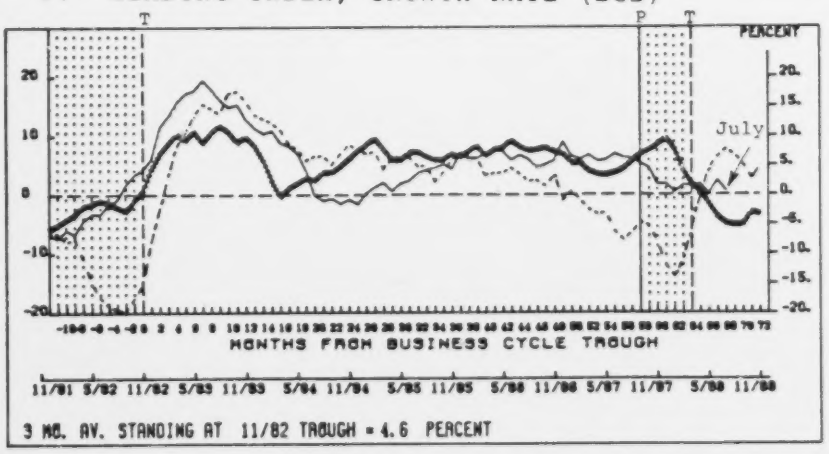
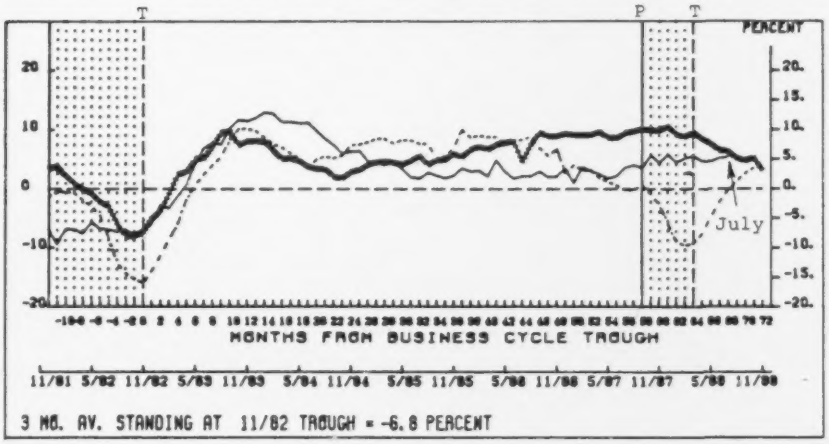
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -7.9 PERCENT

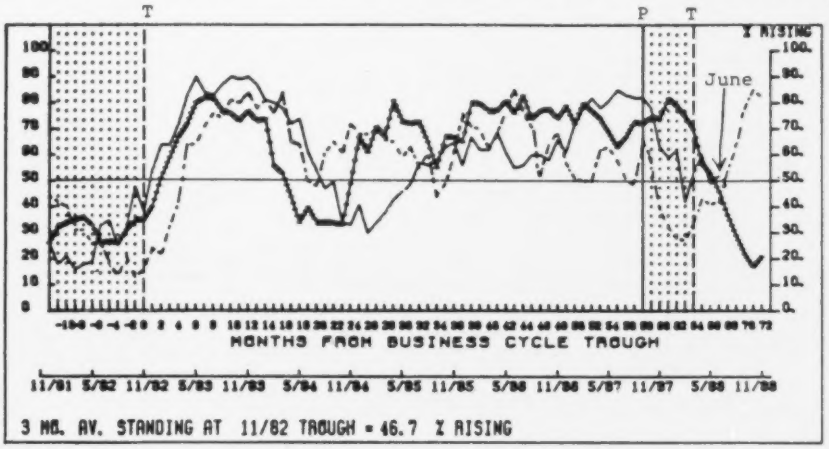
9. LEADING INDEX, GROWTH RATE (BCD)


T
P
T
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.6 PERCENT

10. COINCIDENT INDEX, GROWTH RATE (BCD)

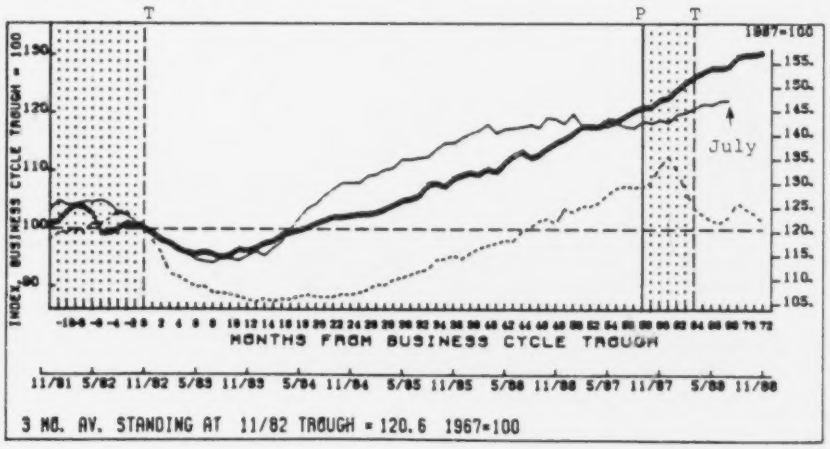


11. DIFFUSION INDEX OF LEADING INDICATORS (CIBCR)

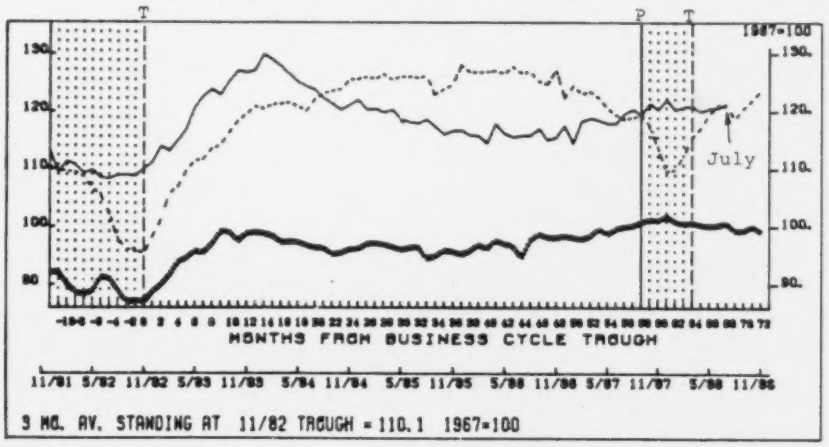


A neutral position

12. LAGGING INDEX (BCD)

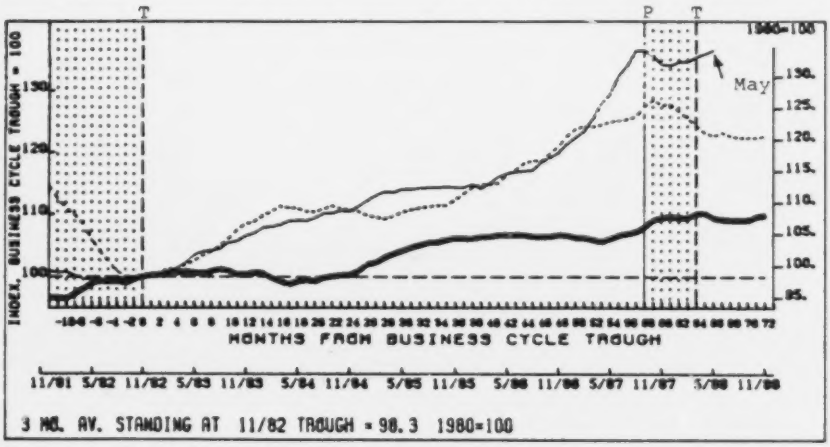


13. RATIO, COINCIDENT TO LAGGING INDEX

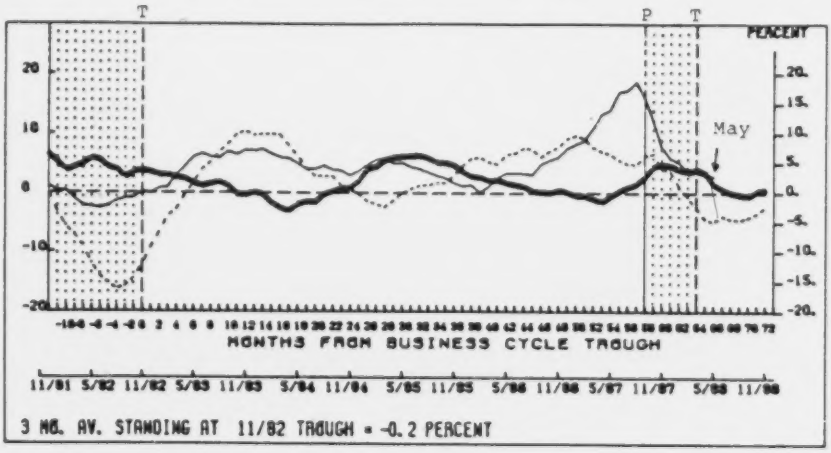


OTHER COMPOSITE INDEXES

14. NINE-COUNTRY LEADING INDEX (CIBCR)*

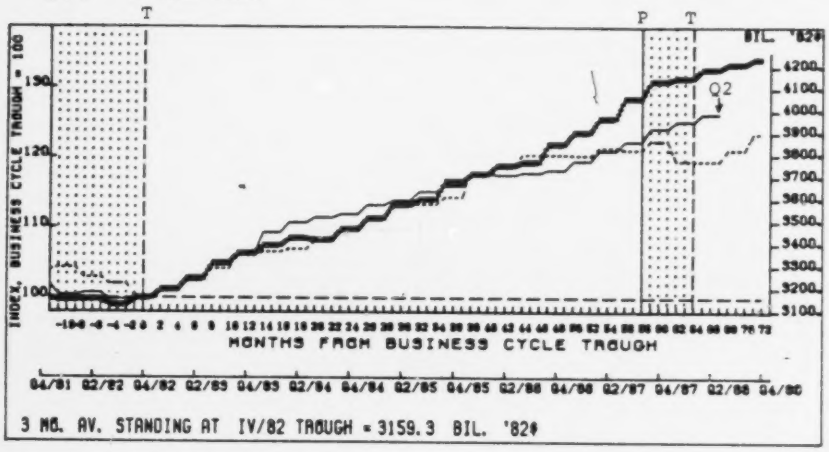


15. NINE-COUNTRY LEADING INDEX, GROWTH RATE

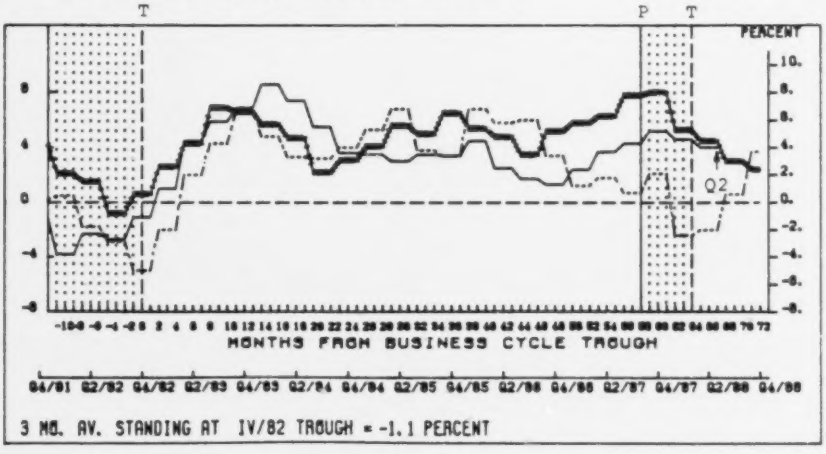


*Canada, United Kingdom, West Germany, France, Italy, Japan, Australia, Taiwan, R.O.C. and Korea, R.O.K.

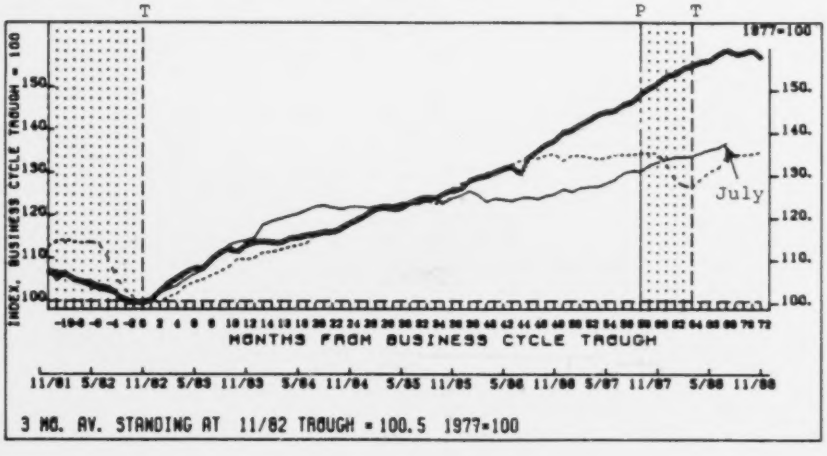
16. REAL GNP



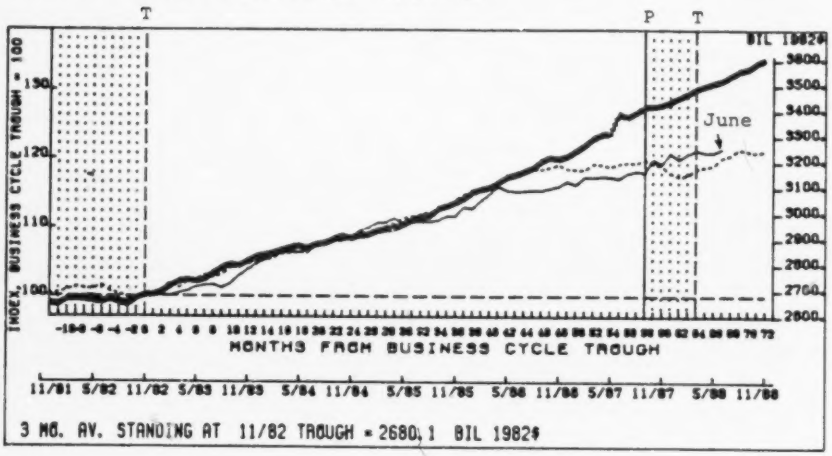
17. REAL GNP, GROWTH RATE



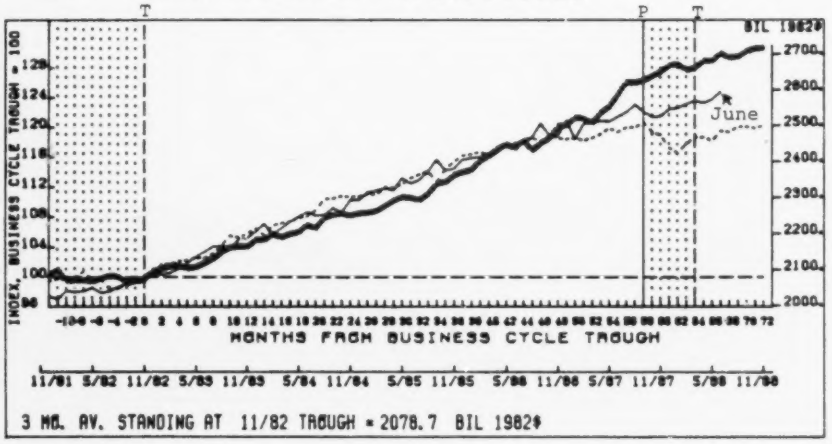
18. INDUSTRIAL PRODUCTION INDEX



19. REAL PERSONAL INCOME


T
P
T
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
June
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2680.1 BIL 1982$

20. REAL CONSUMER EXPENDITURES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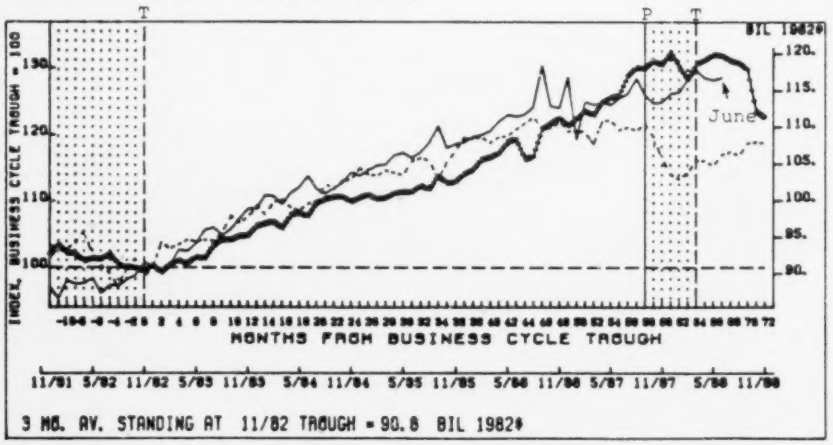
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
June
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2078.7 BIL 1982$

21. REAL RETAIL SALES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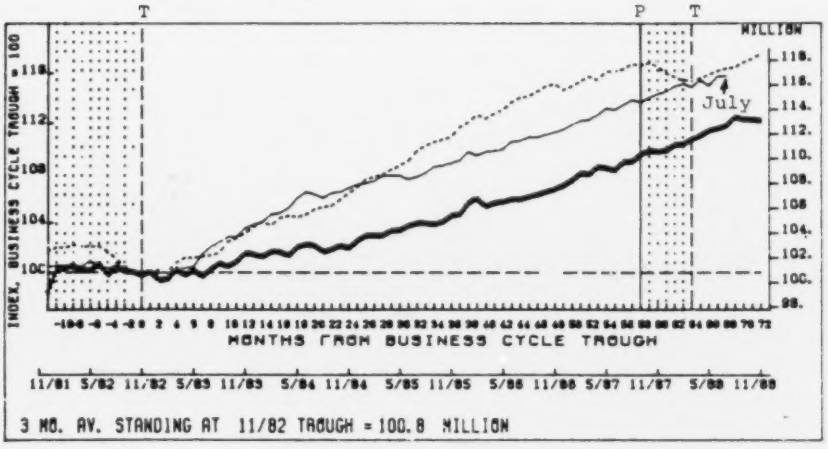
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
June
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 90.8 BIL 1982$

22. TOTAL EMPLOYMENT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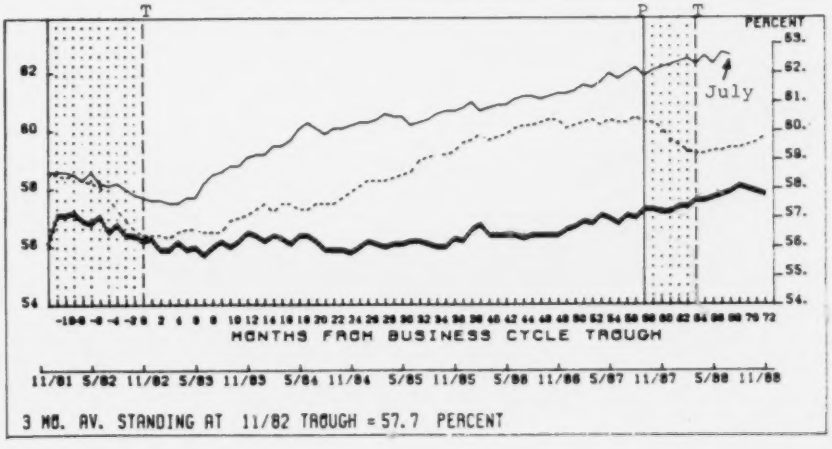
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 100.8 MILLION

23. EMPLOYMENT TO POPULATION RATIO


T
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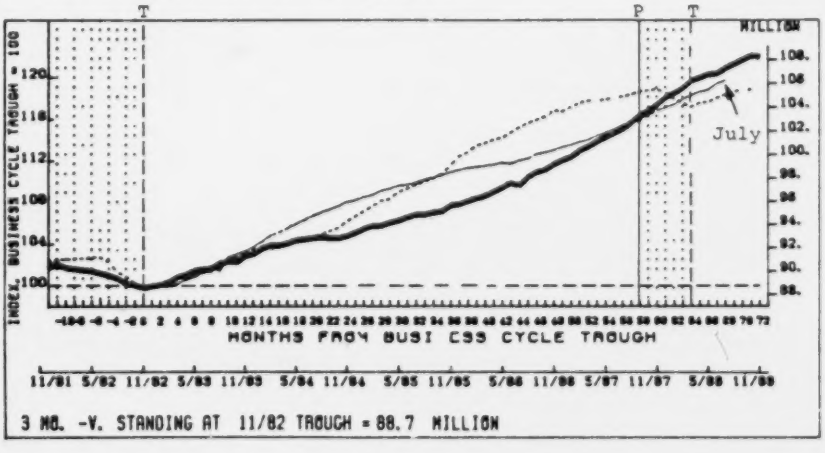
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 57.7 PERCENT

24. NONFARM EMPLOYMENT


T
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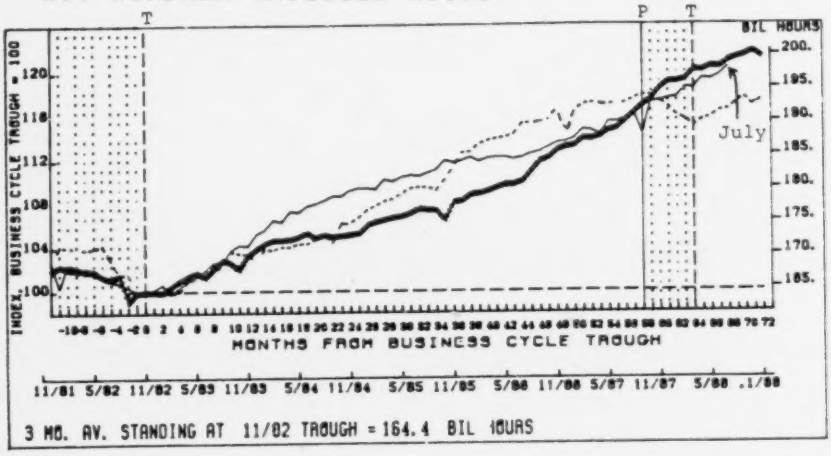
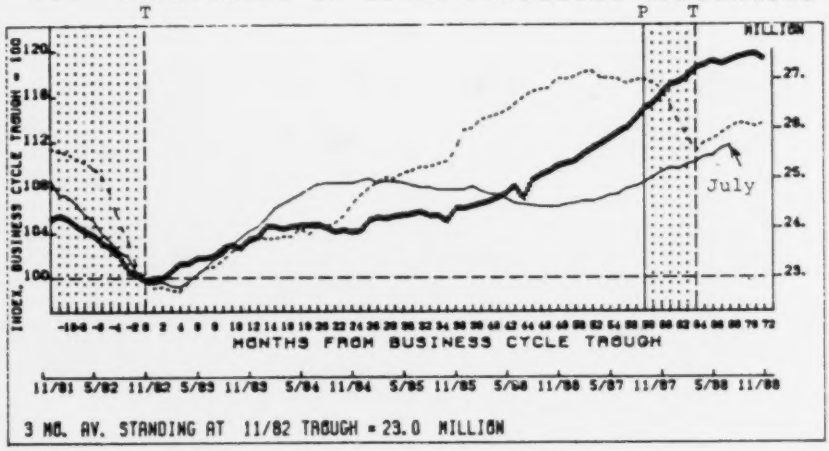
MILLION
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 88.7 MILLION

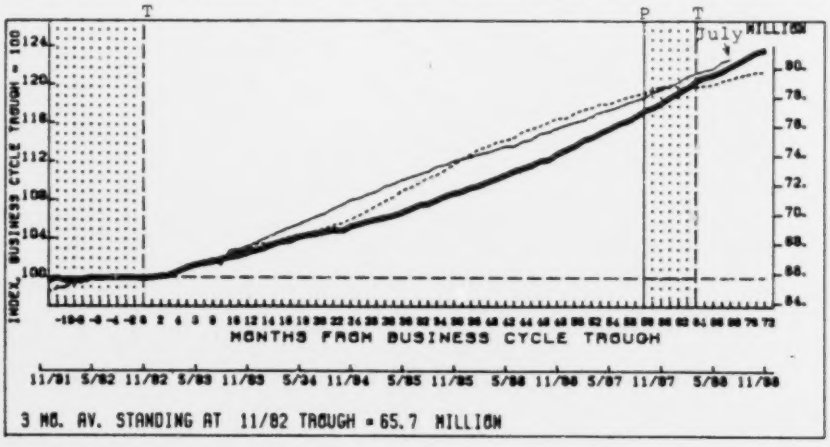
25. NONFARM EMPLOYEE HOURS



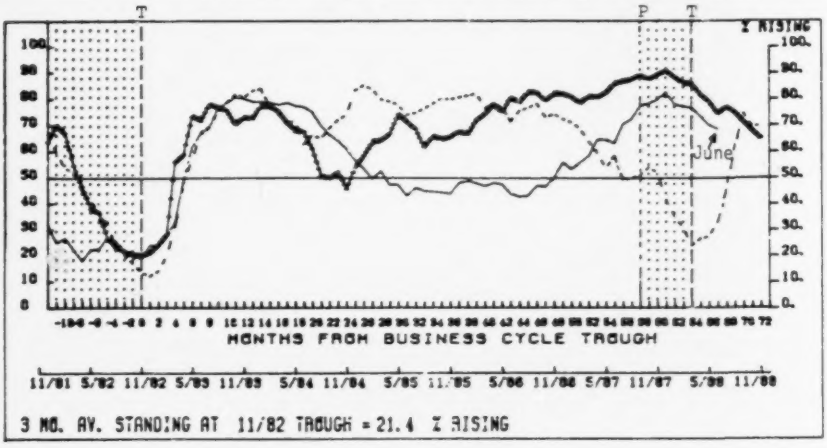
26. EMPLOYMENT IN GOODS-PRODUCING INDUSTRIES



27. EMPLOYMENT IN SERVICE-PRODUCING INDUSTRIES



28. EMPLOYMENT DIFFUSION INDEX, 186 INDUSTRIES


T
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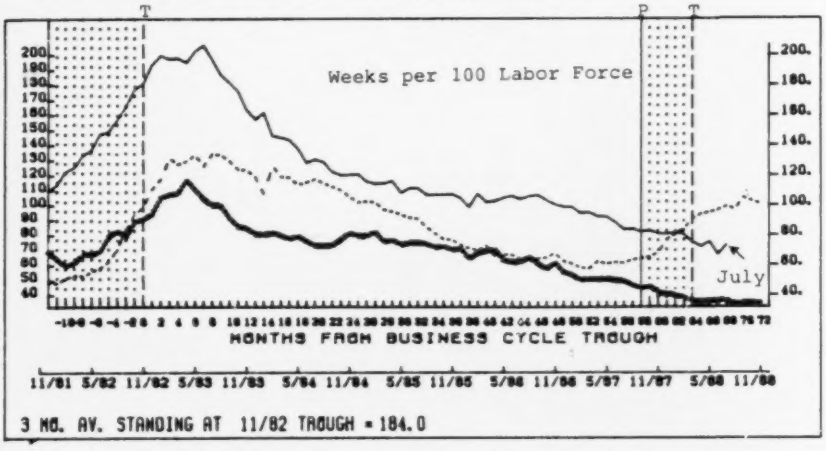
% RISING
June
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 21.4 % RISING

29. UNEMPLOYMENT SEVERITY INDEX


T
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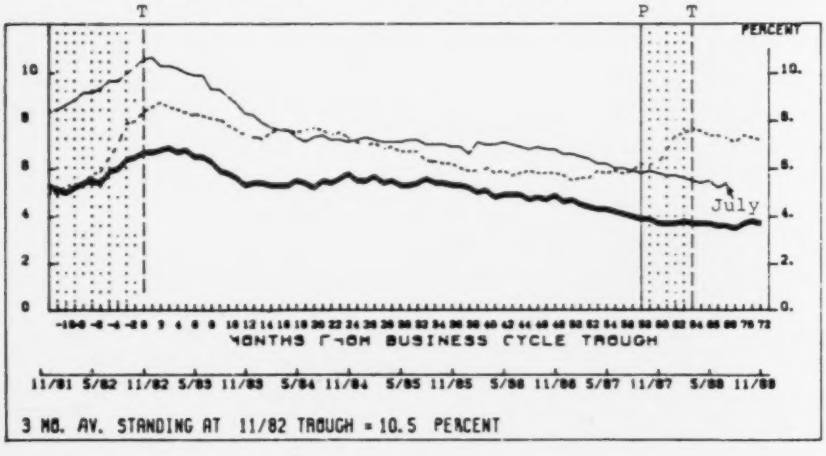
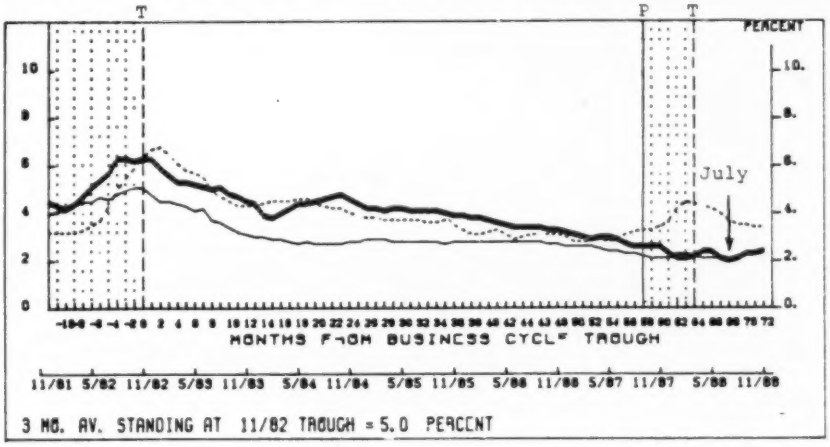
Weeks per 100 Labor Force
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 184.0

30. UNEMPLOYMENT RATE: TOTAL


T
P
T
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 10.5 PERCENT

31. UNEMPLOYMENT RATE: INSURED


T
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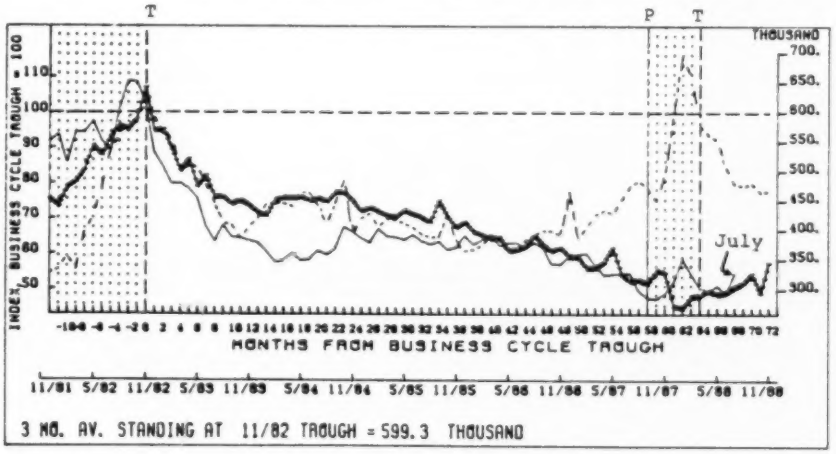
T
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 5.0 PERCENT

32. INITIAL CLAIMS, UNEMPLOYMENT INSURANCE


T
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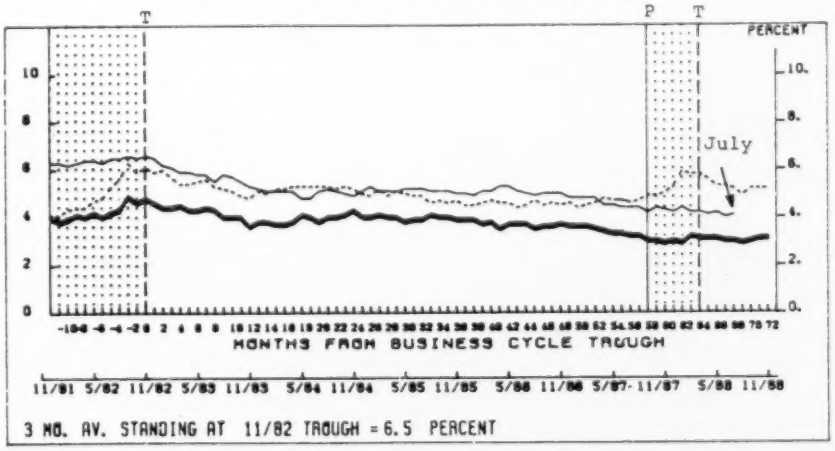
THOUSAND
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 599.3 THOUSAND

33. SHORT-DURATION UNEMPLOYMENT RATE


T
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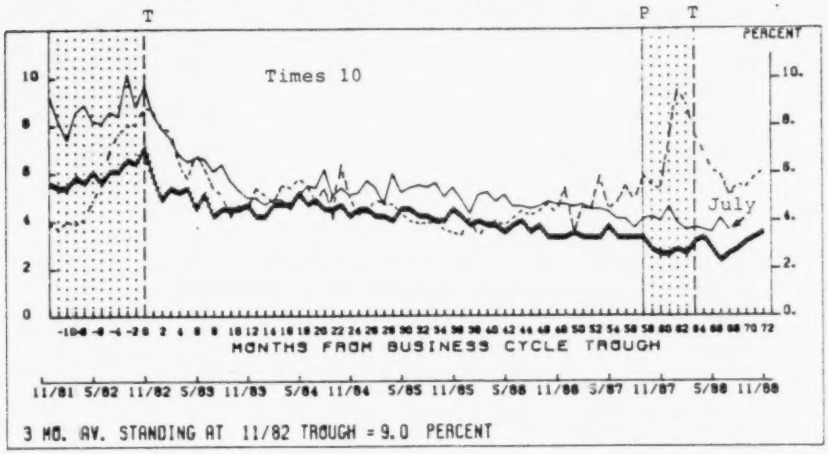
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 6.5 PERCENT

34. LAYOFF RATE UNDER 5 WEEKS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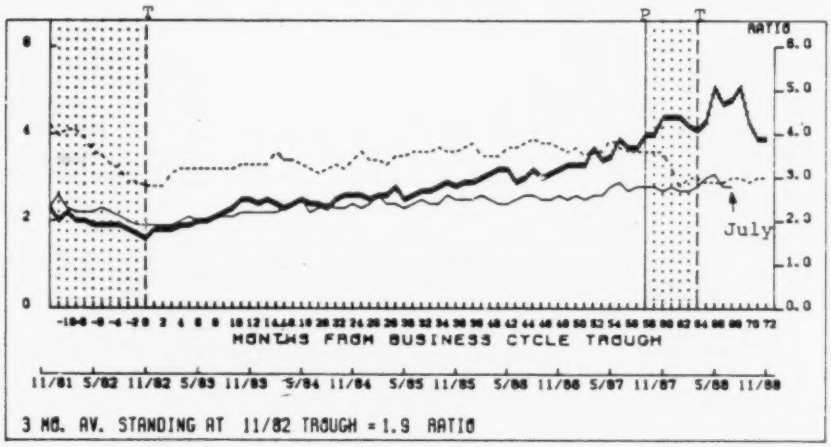
PERCENT
Times 10
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.0 PERCENT

35. VOLUNTARY TO INVOLUNTARY PART-TIME EMPLOYMENT RATIO


T
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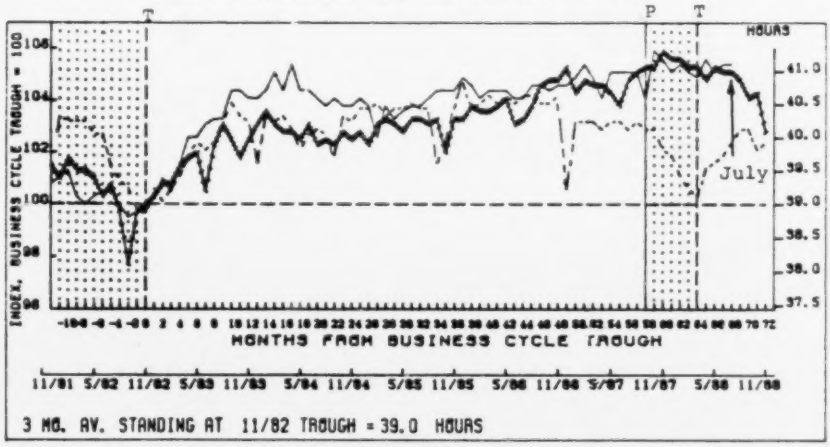
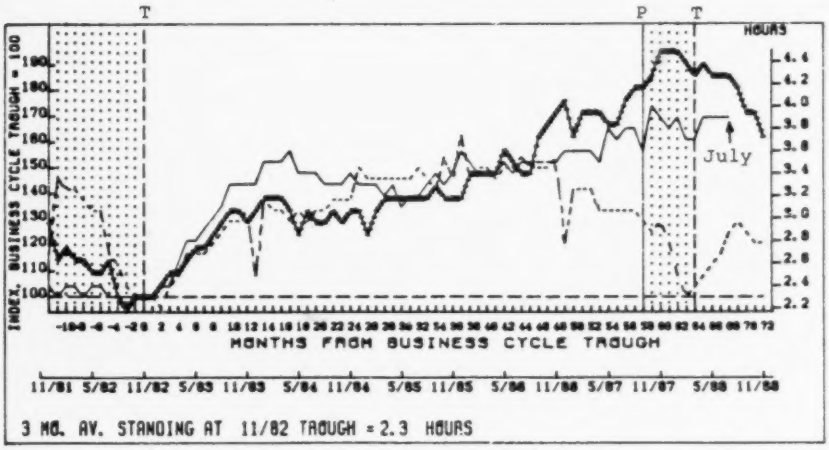
RATIO
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1.9 RATIO

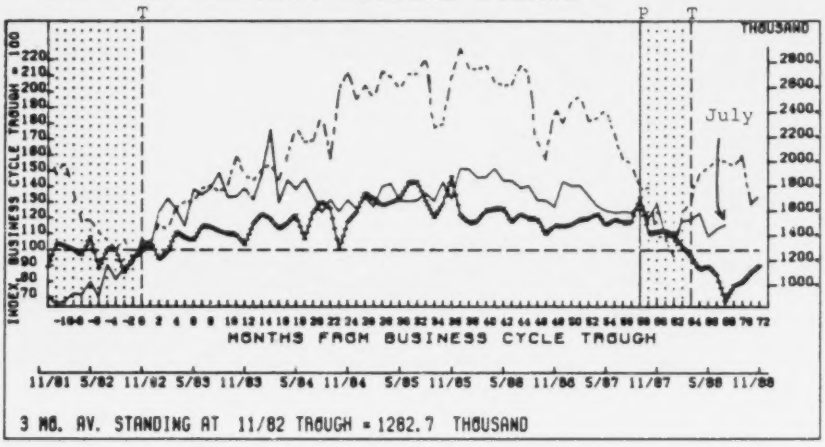
36. AVERAGE WORKWEEK, MANUFACTURING


T
P
T
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 39.0 HOURS

37. OVERTIME HOURS, MANUFACTURING


T
P
T
HOURS
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 2.3 HOURS

38. NEW PRIVATE HOUSING STARTS


T
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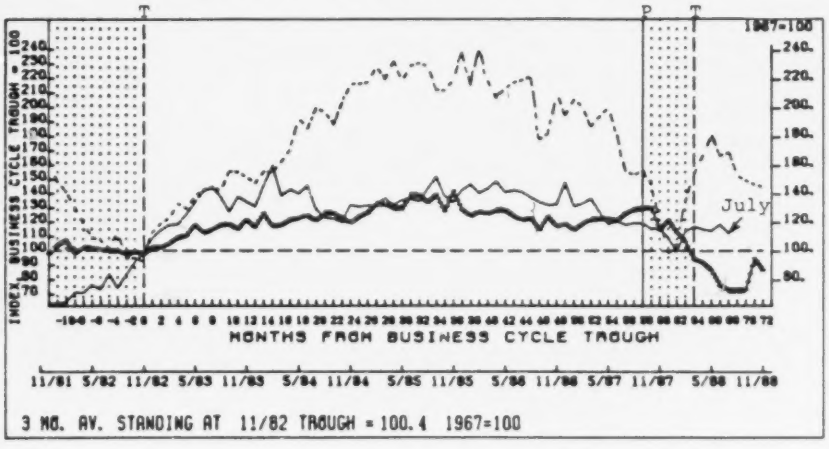
THOUSAND
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 1282.7 THOUSAND

39. NEW PRIVATE HOUSING PERMITS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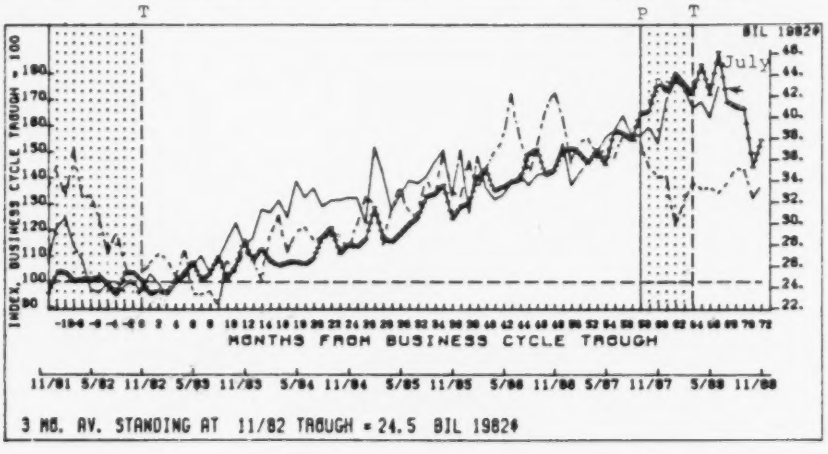
1967=100
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 100.4 1967=100

40. CONTRACTS & ORDERS, PLANT & EQUIPMENT


T
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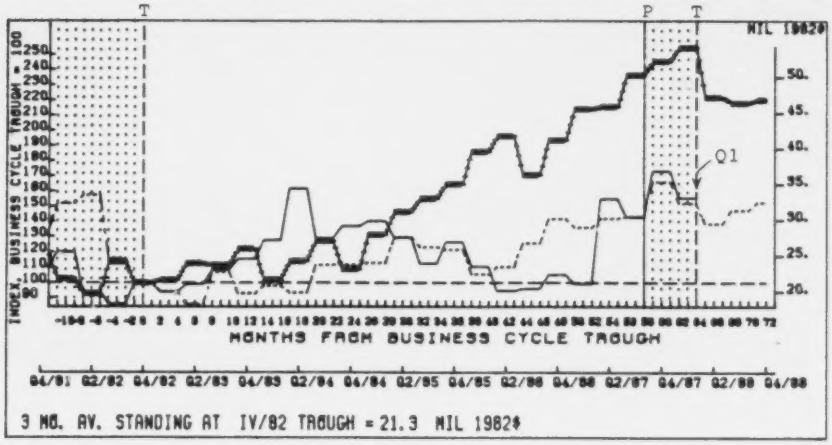
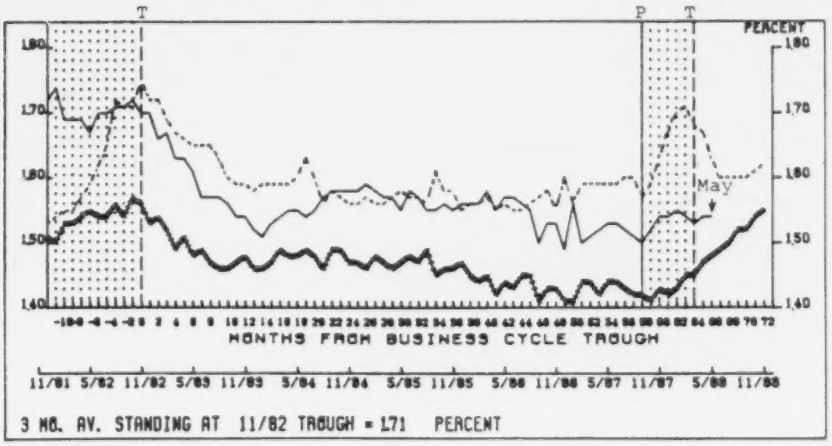
BIL 1982$
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 24.5 BIL 1982$

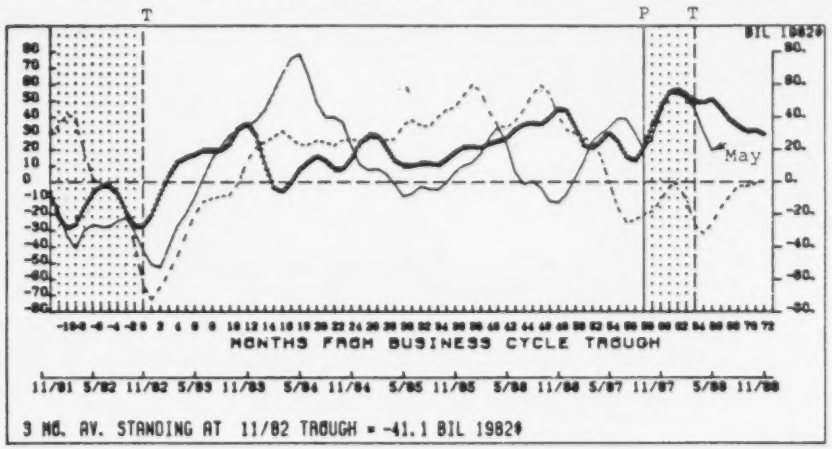
41. NEW CAPITAL APPROPRIATIONS, MANUFACTURING



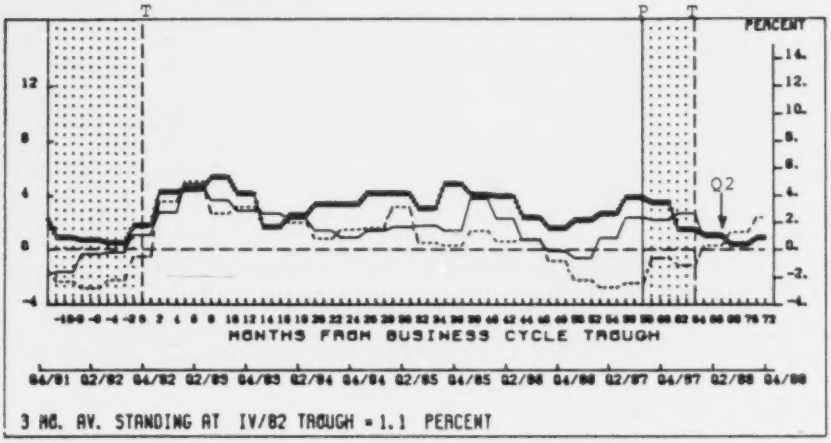
42. INVENTORY/SALES RATIO, MANUFACTURING AND TRADE



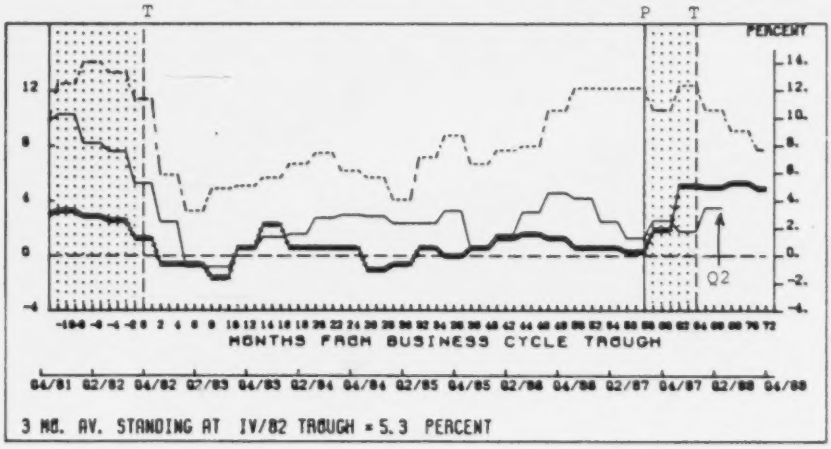
43. CHANGE IN INVENTORY ON HAND & ON ORDER



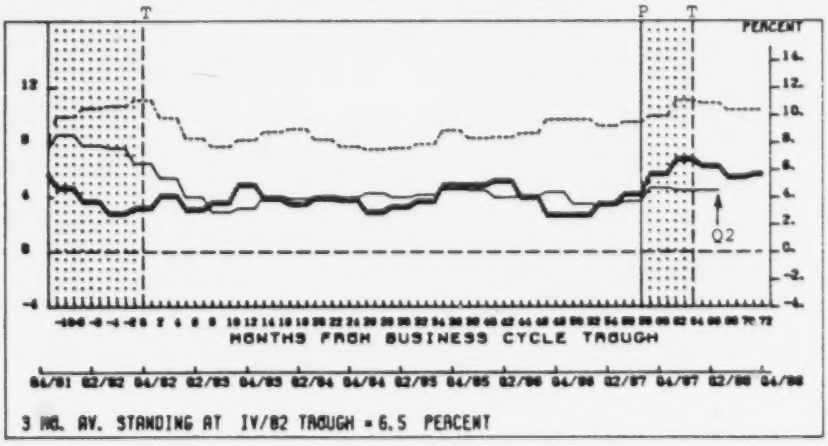
44. OUTPUT PER HOUR, GROWTH RATE



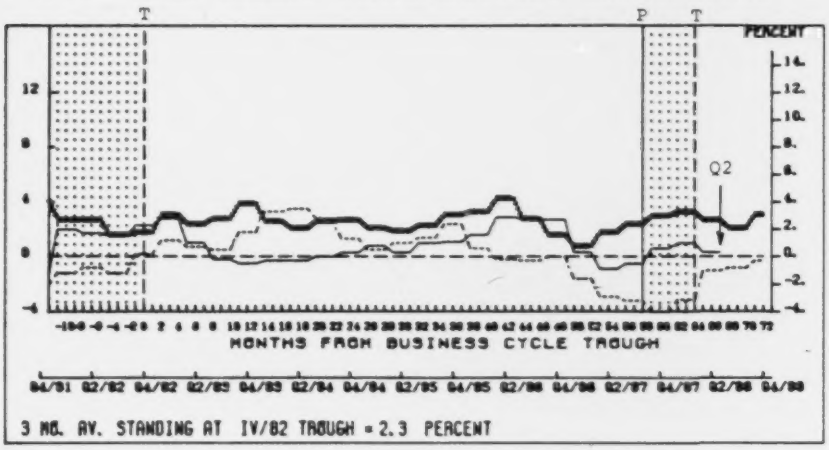
45. UNIT LABOR COSTS, GROWTH RATE



46. HOURLY COMPENSATION, GROWTH RATE

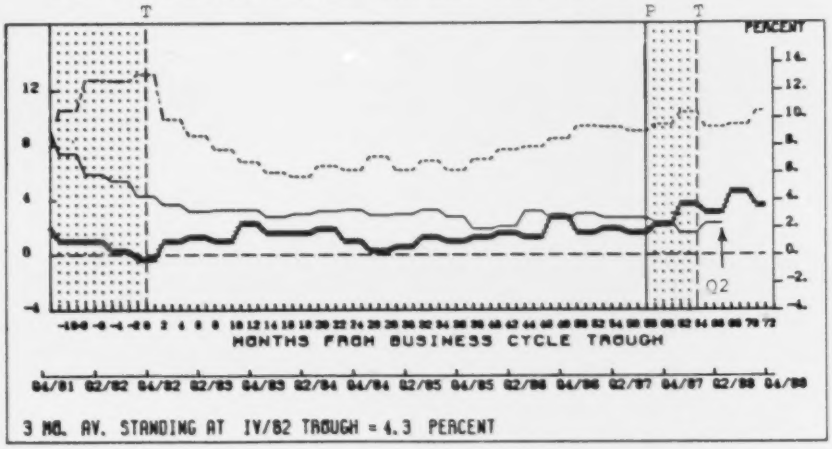


47. REAL HOURLY COMPENSATION, GROWTH RATE

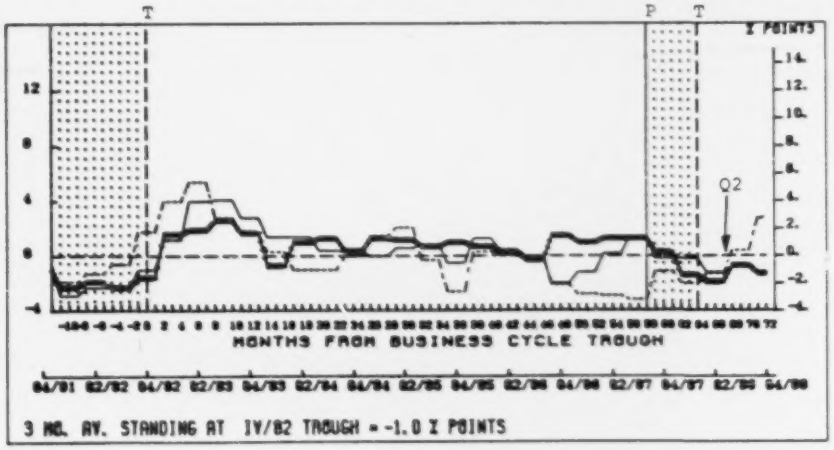


One of the campaign issues!

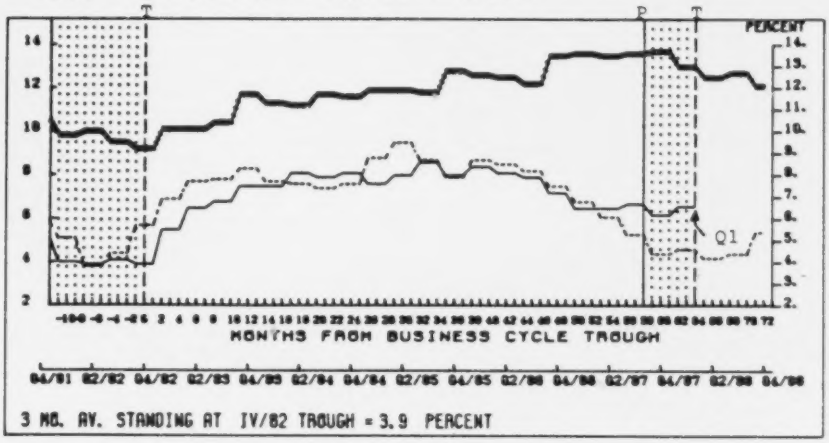
48. SELLING PRICE INDEX, GROWTH RATE



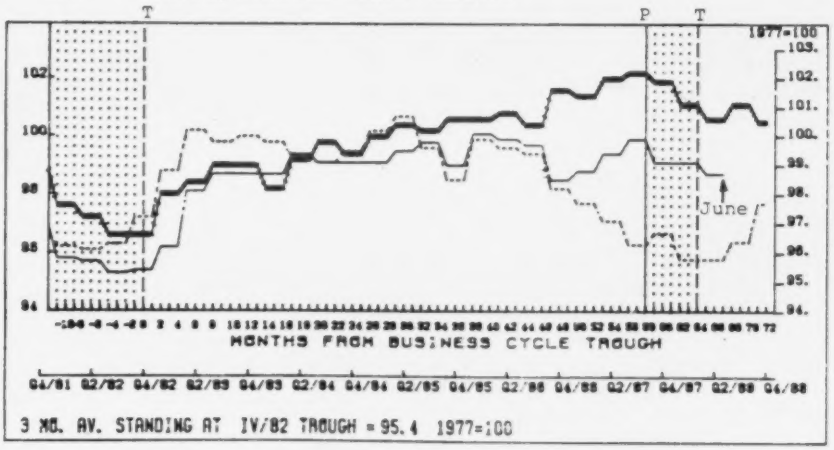
49. GROWTH RATE IN PRICES MINUS GROWTH RATE IN COSTS



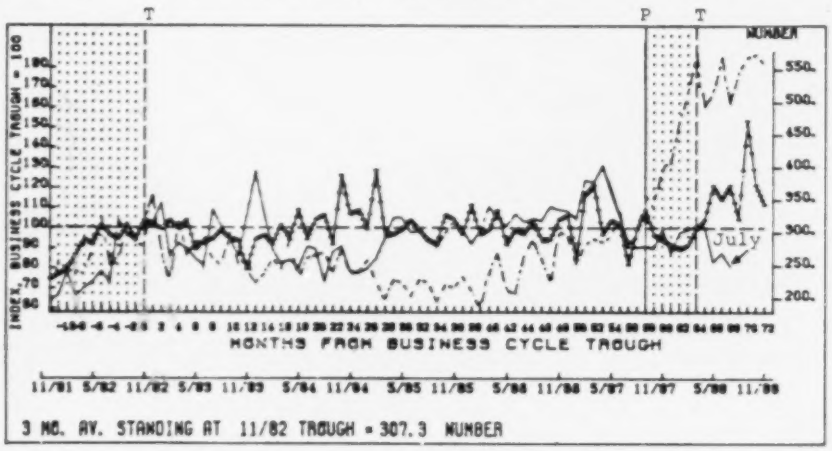
50. CORPORATE PROFIT MARGIN



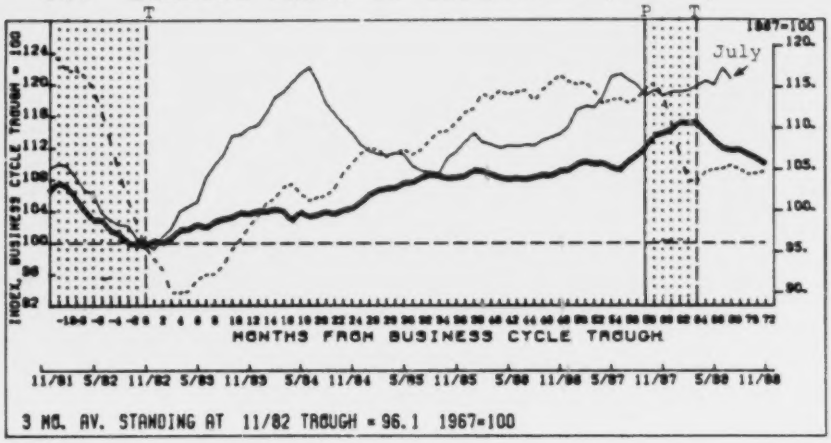
51. PRICE/LABOR COST RATIO



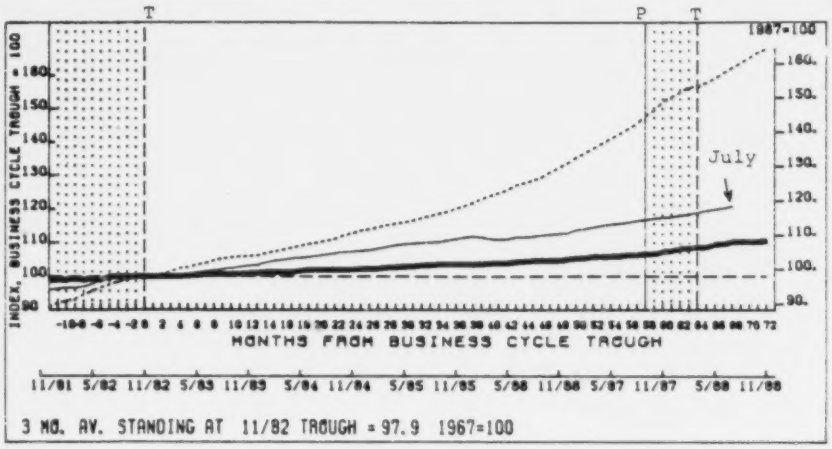
52. LARGE BUSINESS FAILURES



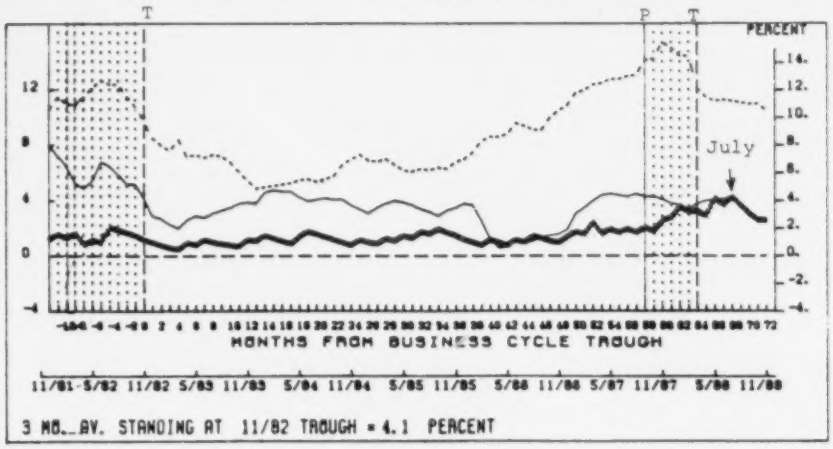
53. LEADING INDEX OF INFLATION (CIBCR)


T
P
T
1967=100
July
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 96.1 1967=100

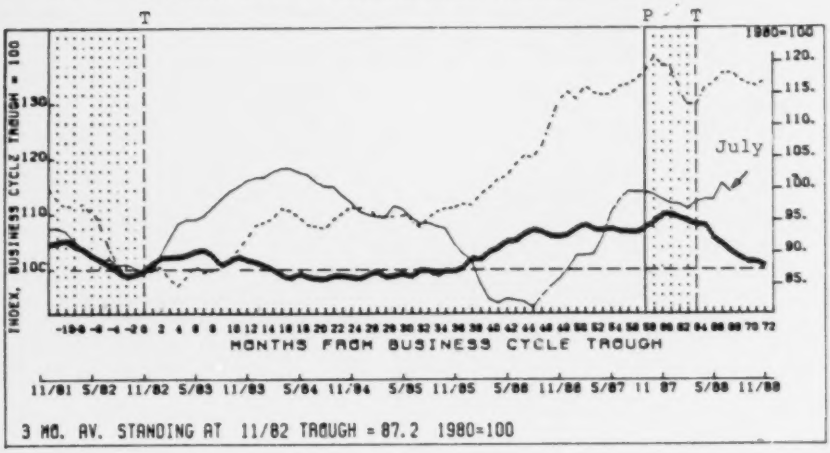
54. CONSUMER PRICE INDEX


T
P
T
1967=100
July
INDEX, BUSINESS CYCLE TROUGH = 100
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 97.9 1967=100

55. CONSUMER PRICE INDEX, GROWTH RATE


T
P
T
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.1 PERCENT

56. INDUSTRIAL MATERIALS PRICE INDEX


T
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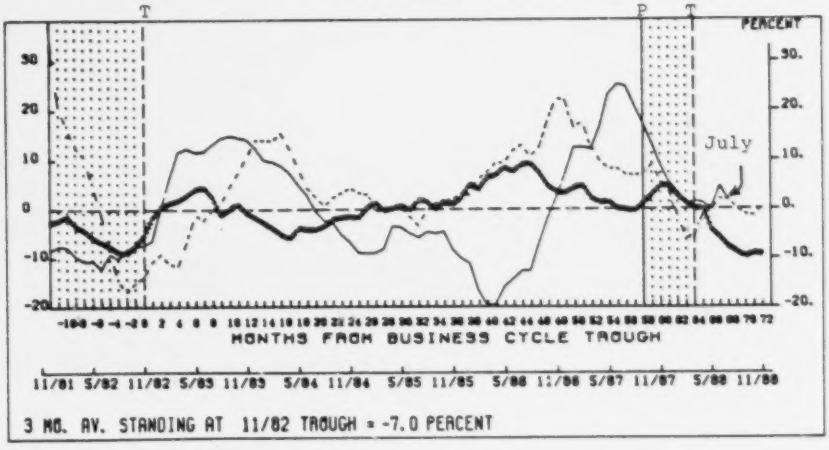
1980=100
INDEX, BUSINESS CYCLE TROUGH = 100
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 87.2 1980=100

57. INDUSTRIAL MATERIALS PRICE INDEX, GROWTH RATE


T
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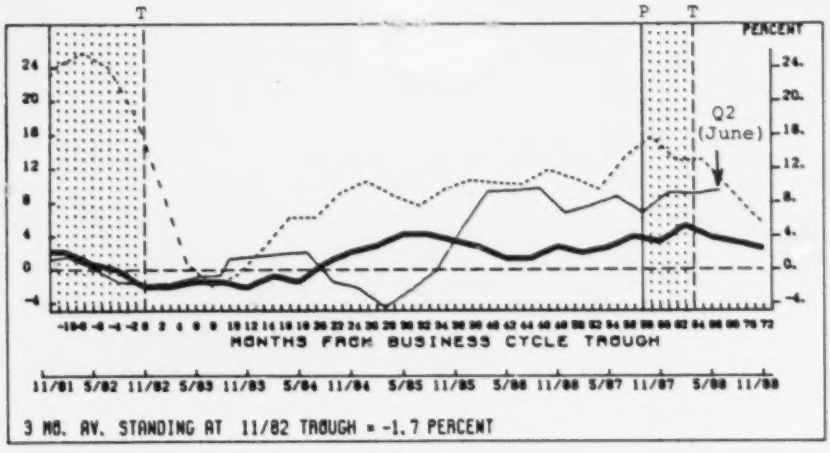
T
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -7.0 PERCENT

58. IMPORT PRICE INDEX (EXCLUDING FUELS), GROWTH RATE


T
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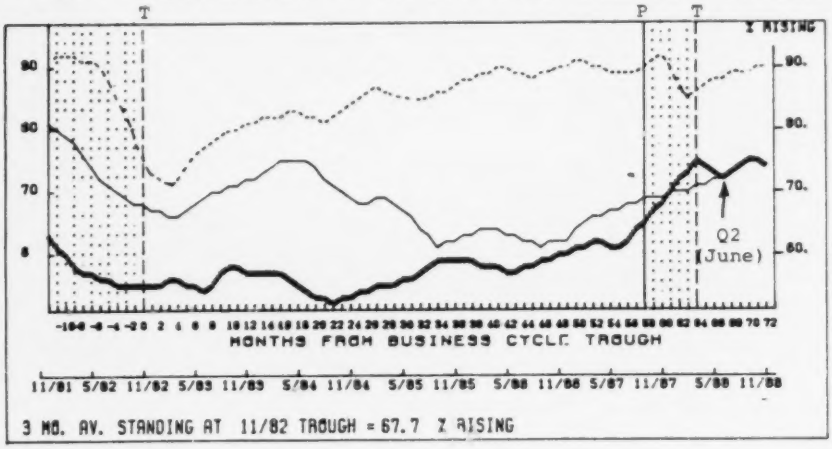
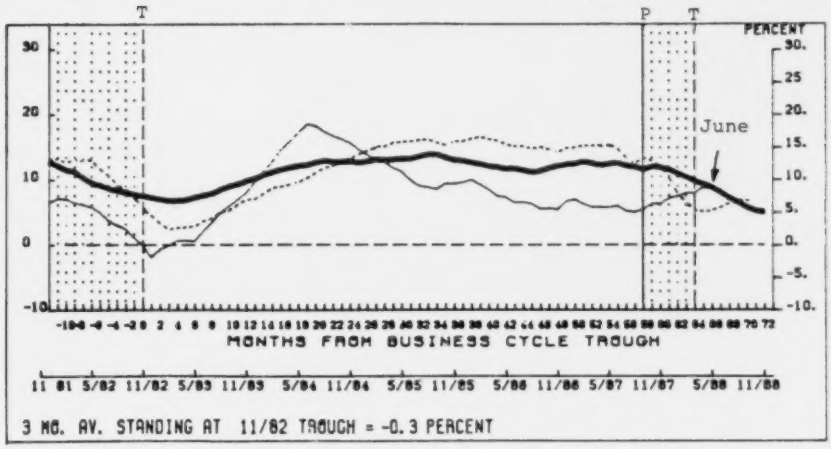
T
PERCENT
Q2
(June)
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -1.7 PERCENT

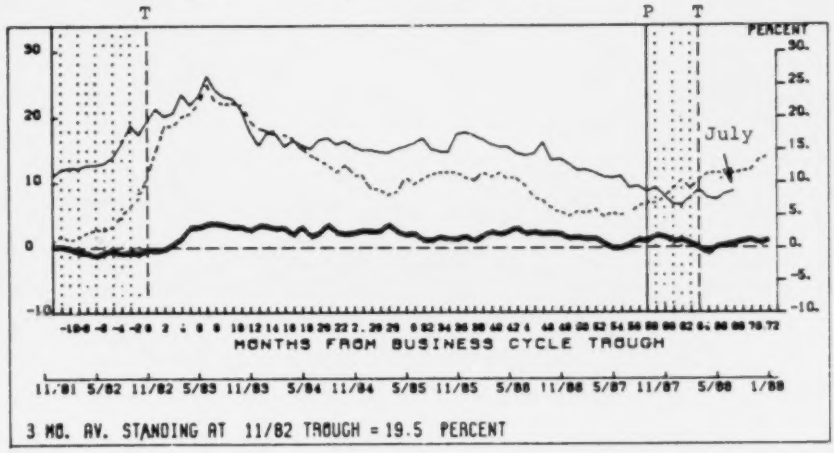
59. BUSINESSMEN'S ANTICIPATED SELLING PRICES (SURVEY)



60. BUSINESS & CONSUMER DEBT, GROWTH RATE


T
P
T
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = -0.3 PERCENT

61. FEDERAL DEBT, GROWTH RATE


T
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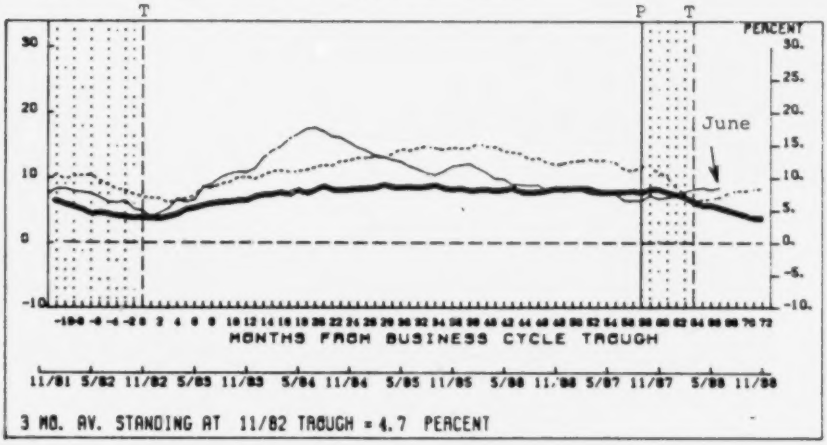
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 19.5 PERCENT

62. TOTAL DEBT, GROWTH RATE


T
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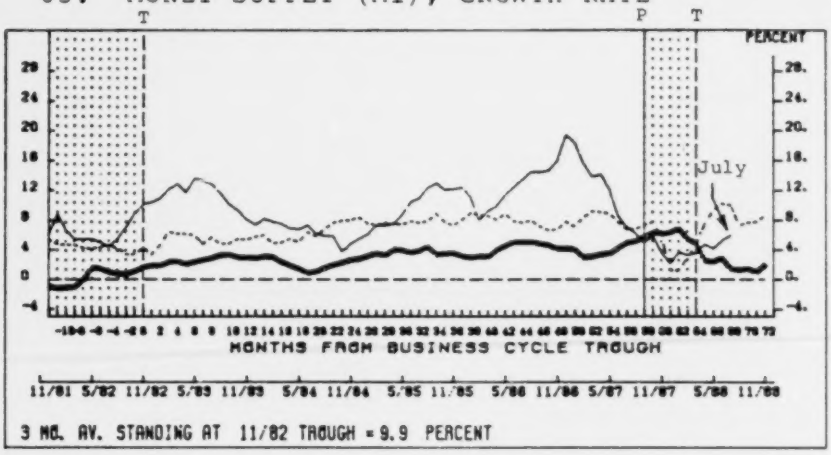
T
PERCENT
June
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 4.7 PERCENT

63. MONEY SUPPLY (M1), GROWTH RATE


T
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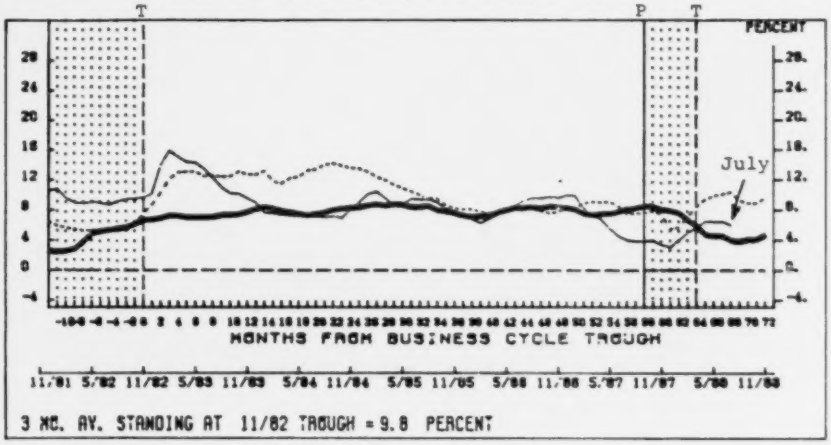
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.9 PERCENT

64. MONEY SUPPLY (M2), GROWTH RATE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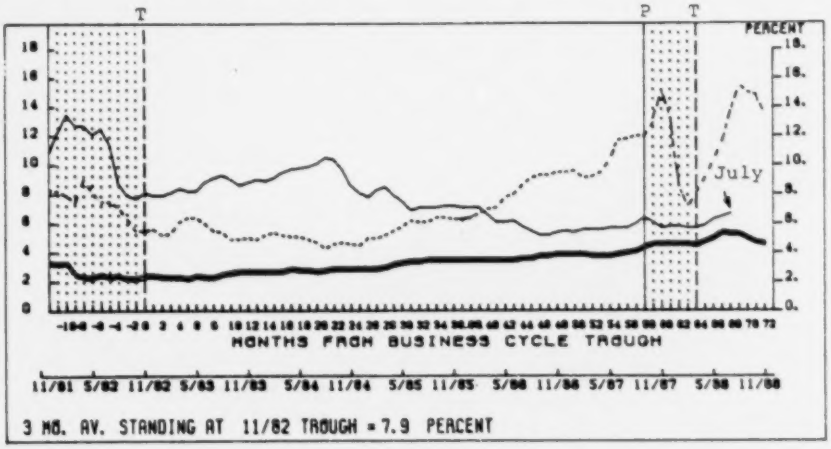
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 9.8 PERCENT

65. TREASURY BILL RATE (3-MONTH)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P
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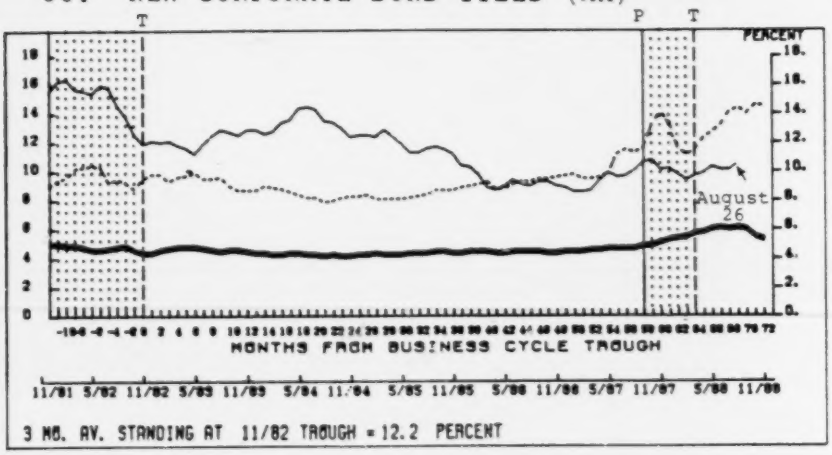
PERCENT
July
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 7.9 PERCENT

66. NEW CORPORATE BOND YIELD (AA)


T
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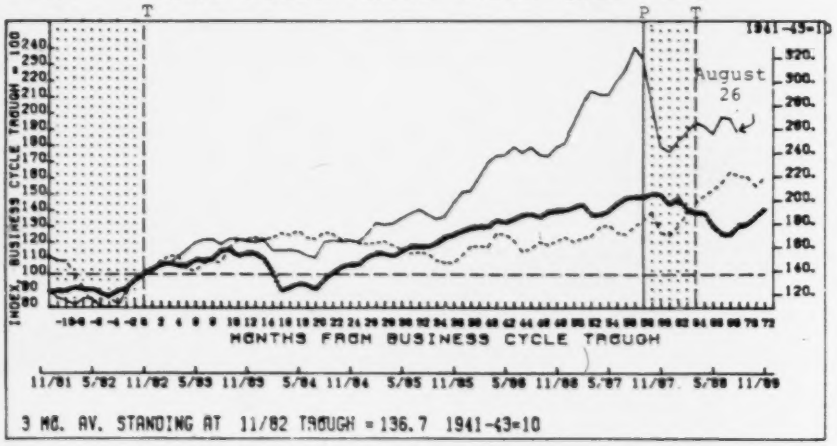
T
PERCENT
August
26
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 12.2 PERCENT

67. COMMON STOCK PRICE INDEX (S&P 500)


T
P
T
INDEX, BUSINESS CYCLE TROUGH=100
August
26
MONTHS FROM BUSINESS CYCLE TROUGH
11/81 5/82 11/82 5/83 11/83 5/84 11/84 5/85 11/85 5/86 11/86 5/87 11/87 5/88 11/88
3 MO. AV. STANDING AT 11/82 TROUGH = 136.7 1941-43=10

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Uris Hall, Columbia University
New York, NY 10027
Telephone: (212) 280-2916

ABOUT THIS REPORT

RECESSION-RECOVERY WATCH is a bimonthly report designed to analyze current business cycle trends in terms of previous recession or recovery patterns in the United States.

This report was begun in August 1979, under the direction of Dr. Geoffrey H. Moore, following the methodology for measuring recessions developed at the National Bureau of Economic Research. Although no forecasts are made, the materials in this report do permit glimpses into the future: first by analyzing the behavior of various leading indicators; second, by indicating what is likely to happen in terms of what did happen in previous recessions and recoveries.

The leading indicators used in this report are relevant to future output and employment because they represent actions taken, like the placing of orders, that will result in future output, or because they reflect factors, like profits, that influence future decisions on output. The record of what happens during the latter stages of business cycles is relevant because of the family resemblance among successive cycles, a resemblance that has its origin in the processes by which business cycles are generated. Every business cycle has its own surprises, partly because of policy actions taken, but many developments are not surprising, having occurred many times before. The historical comparisons contained in this report help one anticipate what is typical and distinguish it from the unusual.

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